

**AGENDA REPORT  
PLANNING AND ZONING COMMISSION MEETING  
MARCH 8, 2012**

**SUMMARY**

A request by TKG Conley Road, LLC (owner) for rezoning from R-1 (one-family dwelling) to C-3 (general business). The 18.31-acre property is located at 511 Conley Road, on the former MoDOT site, north of Walmart. **(Case 12-17)**

**REQUESTED ZONING**

C-3 (General Business District)

**DISCUSSION**

- Application Overview & Purpose

The requested rezoning is part of a larger comprehensive effort to fulfill several long-term City transportation goals as well as resolve issues associated with the Columbia County Club's golf course operations. The parcel sought to be rezoned was previously presented to the Commission in January and February 2010 (Case # 09-124); due to several unresolved issues, however, it was withdrawn. Many of those issues dealt with compensation to the Columbia Country Club (CCC) for the necessary right-of-way to complete the extension of East Boulevard to Business Loop 70.

The current application follows two more years of negotiation between the applicant, the Conley Road TDD, and the CCC. These negotiations have produced an equitable settlement regarding the purchase of the necessary right-of-way for the extension of East Boulevard as well as the reconstruction of the golf course. The East Boulevard connection is a critical transportation element shown on the City's MRP (Major Roadway Plan), CATSO Plan, and was the principal reason for forming the Conley Road TDD in 2005.

- Zoning Compatibility

Unlike the 2010 rezoning request, which was for C-P zoning, the petitioner is requesting C-3 zoning for the subject site. The proposed zoning would permit uses consistent with the adjacent properties to the north and south and is consistent with the recommended "Commercial District" designation of the Metro 2020 Plan. The site features several former MoDOT buildings that would be demolished. R-1 zoning is immediately to the west and is improved with the Columbia Country Club. To the east are Conley Road and the U.S. Highway 63 right-of-way.

The proposed C-3 zoning for the site, in staff's opinion, is an appropriate future designation based on the site's contextual location. Based on that context, development under the R-1 designation is not appropriate or likely. Future use of the site for C-3 commercial purposes, however, requires consideration of several factors to ensure that future development does not overwhelm the existing infrastructure systems.

Typically, when a development of this scale is proposed, an application for a "planned" district would be expected. The applicant is cognizant of this fact, but believes that C-3 zoning is appropriate and has proposed a development agreement (attached) to address many of the site-specific infrastructure issues that would otherwise have been addressed within a planned designation.

In reviewing the proposed agreement, staff believes it provides the necessary assurances that the requisite public infrastructure to support the proposed commercial development will either be installed prior to the issuance of the first certificate of occupancy (CO) or provide funding to cover the expenses for its installation by the City.

The proposed development agreement is in addition to the existing Conley Road TDD agreement (approved in December, 2005) and an intergovernmental cooperation agreement between the TDD and the City (approved in May, 2006). Section 4 of the proposed development agreement includes specific language binding the applicant and its heirs to three criteria related to completion of the specific roadway improvements articulated in the TDD and intergovernmental agreements. Additionally, the proposed development agreement secures the right to and specifies the process by which the City will acquire the necessary easements for the construction of the Hinkson Creek Trail through the subject site.

While a planned zoning designation would permit additional oversight for future development of the subject property, it is staff's opinion that such oversight is not necessary. The subject tract is in an area of C-3 commercial zoning. Application of planned district requirements would likely have minimal impact on site development issues presently being proposed to be addressed within several other documents affecting this site. These documents include: the proposed development agreement; the East Boulevard extension construction plans; and the CCC/Conley Road TDD/TKG Conley Road, LLC agreement relating to the golf course reconstruction.

- **Traffic considerations**

Improvement of the subject site for general retail uses similar to those to the south is anticipated should the property be rezoned to C-3. Such improvement will create several impacts on the adjacent roadway network, as well as internal shopping center circulation. As part of the 2010 rezoning request, an update to the 2007 traffic study relating to Broadway Marketplace was performed. This update (attached) evaluated traffic conditions with and without the extension of East Boulevard. The purpose of the

2010 study was to illustrate that the improvement of the subject site did not require the extension of East Boulevard - the principal reason for the Conley Road TDD.

The extension and construction of East Boulevard is now included in the rezoning request and is assured through the proposed development agreement. As such, many of the issues concerning staff about overwhelming the existing transportation network and failing to fulfill the TDD obligations have been mitigated. However, the City Traffic Engineer still believes that the intersection improvements articulated in the updated traffic study are necessary to complement the East Boulevard extension.

Exhibit B of the development agreement shows the phasing of the proposed Conley Road/East Boulevard improvements. Plans for those improvements were submitted in 2009 and have been reviewed by staff; however, they were not formally approved. Based on the updated traffic study, conducted after the road plans were submitted, it appears necessary to update the plans to reflect the intersection improvements desired by the City Traffic Engineer as well as include language within the development agreement binding the applicant and its heirs to adhering to those recommendations. Such actions will ensure that the City's interests in securing the needed infrastructure upgrades are appropriately associated with the development creating the demands.

- **Transportation Development District considerations**

The subject site has been added into the Conley Road TDD subsequent to the 2010 requested zoning action. The proposed public improvements to be made on the site, therefore, can be offset by TDD sales tax collections. As of September, 2011, the most current information available, the TDD had collected a total of \$6,276,503 toward infrastructure and other improvements. Upon its establishment in 2005, the TDD area was assumed to require approximately \$20 million in associated improvements, and anticipated to collect \$57 million over its estimated 35-year lifespan. These figures were confirmed by the Missouri Department of Revenue (DOR) and a February, 2012 report on TDDs by State Auditor Thomas Schweich.

As noted above, the development agreement provides specific language assuring that the transportation improvements surrounding the subject site will be installed prior to issuance of the first occupancy permit for new construction or will have money provided to the City for their installation. While staff cannot confirm specifically what improvement expenditures toward which the \$4.3 million in existing tax collections have allocated, it believes the binding nature of the development agreement will provide the assurance that the TDD or the developer will be responsible for the costs to construct the future improvements and not the City of Columbia.

## **STAFF RECOMMENDATION**

Staff recommends approval of the rezoning application and acceptance of the development agreement, subject to the following amendment:

- Additional language be added that will bind the applicant and its heirs to installation of the intersection improvements articulated in the January, 2010 updated traffic study prepared by Crawford, Bunte, Brammeier (CBB) for the subject site. Such language shall also compel the 2009 East Boulevard extension plan to be amended to incorporate the same intersection improvements.

## **Supporting Documentation**

Development Agreement  
Case # 09-124 (withdrawn)  
PZC minutes (January 7 and February 18, 2010)  
2010 Traffic Study

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## **SITE CHARACTERISTICS**

<b>Area (acres)</b>	18.31
<b>Address</b>	511 Conley Road
<b>Topography</b>	Steep relief to north and west; moderate drop toward east
<b>Vegetation</b>	Trees predominant on northern, western, and southern sides
<b>Watershed</b>	Hinkson Creek

## **SITE HISTORY**

<b>Annexation date</b>	1962
<b>Initial zoning designation</b>	R-1, 1962
<b>Previous rezoning requests</b>	N/A
<b>Land Use Plan designation</b>	Commercial
<b>Existing use(s)</b>	Vacant MoDOT facilities
<b>Existing zoning</b>	R-1

## **SURROUNDING LAND USES**

<b>Orientation from site</b>	<b>Zoning District</b>	<b>Land use</b>
North	C-P/R-1	Residential/Columbia Country Club golf course
South	C-3	Walmart
East	N/A	Highway 63
West	R-1	Columbia Country Club golf course



### **UTILITIES & SERVICES**

<b>Sanitary Sewer</b>	City of Columbia
<b>Water</b>	City of Columbia
<b>Electric</b>	City of Columbia
<b>Fire Protection</b>	City of Columbia

### **ACCESS**

<b>Conley Road</b>	
<b>Location</b>	Eastern boundary
<b>Major Roadway Plan classification</b>	Major Collector
<b>Capital Improvement Program projects</b>	Description: East Blvd. to Conley Road Cost: N/A Timeline: 10+ years

### **PARKS & RECREATION**

<b>2008 Neighborhood Parks Plan</b>	Stephens Lake Park
<b>2010 Trails Plan</b>	Proposed primary trail along Hinkson Creek
<b>Bicycle/Pedestrian Network Plan</b>	Backbone pedway along Hinkson Creek

### **PUBLIC NOTIFICATION**

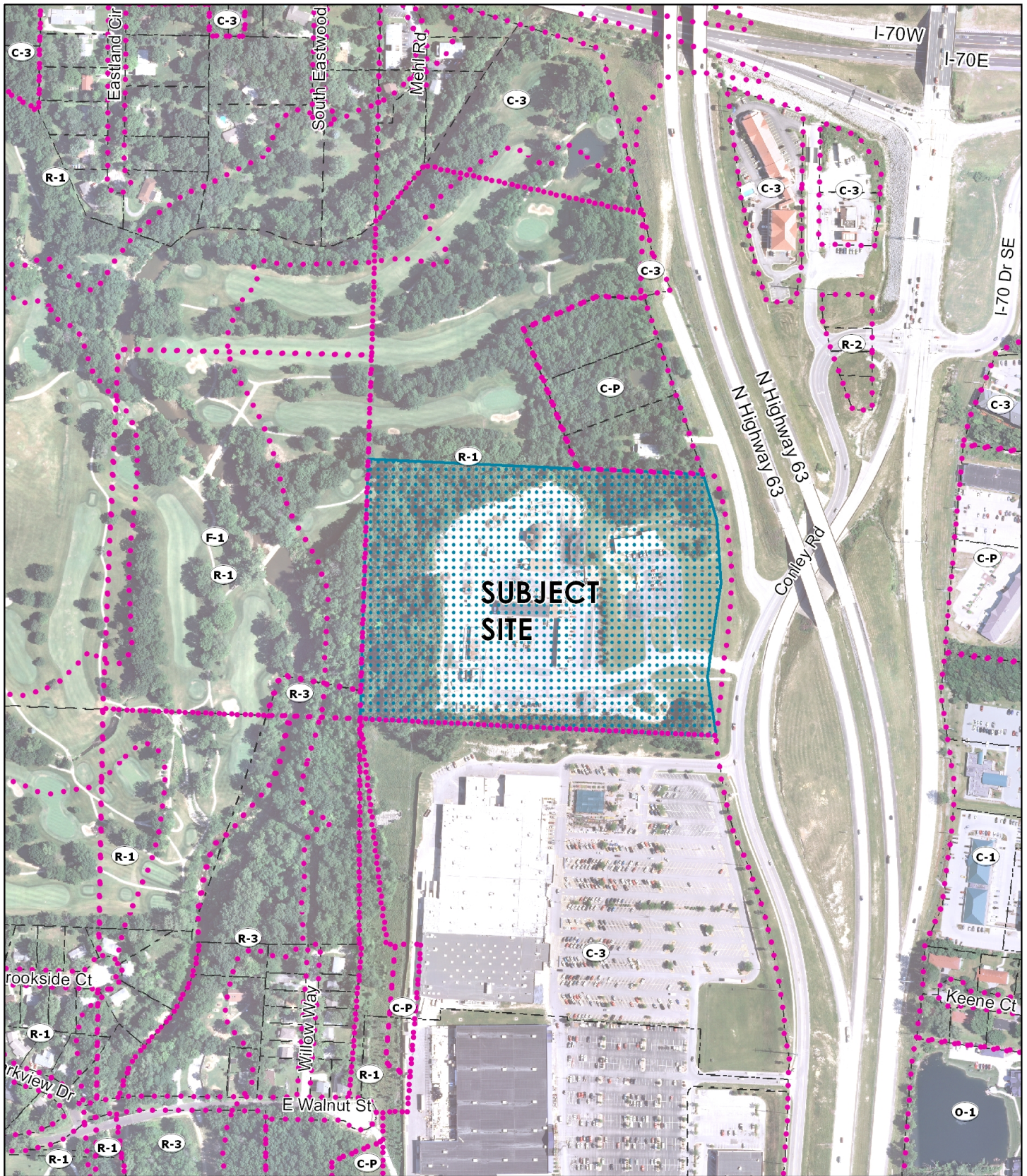
All property owners within 200 feet and City-recognized neighborhood associations within 1,000 feet of the boundaries of the subject property were notified by postcard of a public information meeting, which was held on February 14, 2012.

<b>Public information meeting recap</b>	Number of attendees: 1 (TKG's representative) Comments/concerns: None
<b>Neighborhood Association(s) notified</b>	East Walnut, Country Club Estates
<b>Correspondence received</b>	None

Report prepared by\_\_\_\_\_

Approved by\_\_\_\_\_

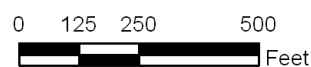




# **TKG Conley Road Investments, LLC** **Case 12-17 Rezoning**



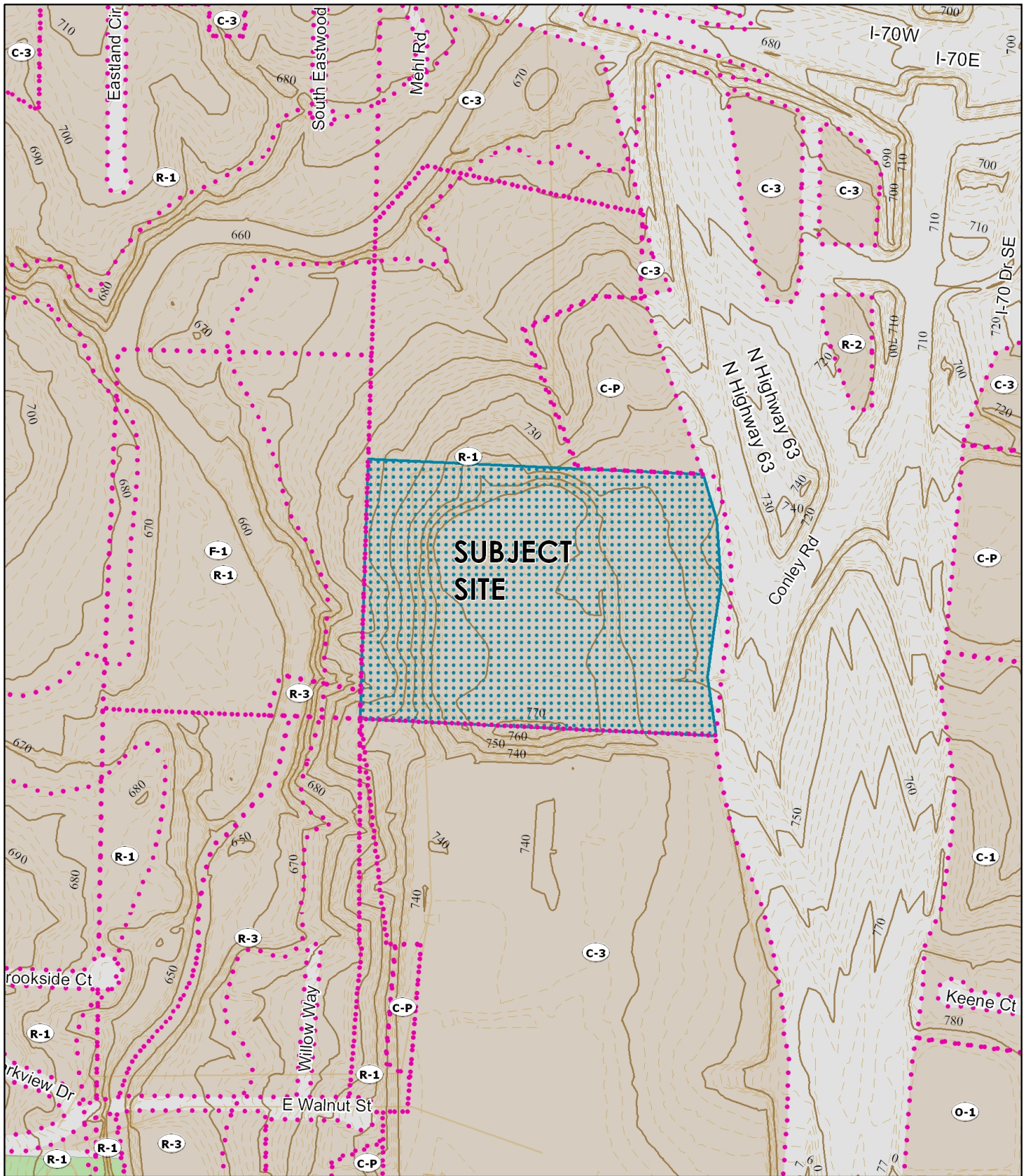
Aerial Image 2007



1 inch represents 400 feet







# TKG Conley Road Investments, LLC

## Case 12-17 Rezoning



0 125 250 500  
Feet  
1 inch represents 400 feet  
Contour Interval: 2 feet



## **Development Agreement**

THIS DEVELOPMENT AGREEMENT ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2012, by and among **TKG Conley Road Investments, L.L.C.**, a Missouri limited liability company (the "Developer"), and the **Conley Road Transportation Development District**, a Missouri transportation development district (the "TDD"), and the **City of Columbia**, a municipal corporation (the "City"), (Developer, TDD, and City collectively hereinafter referred to as the "Parties" or "Party" as may be the case).

### **WITNESSETH**

**WHEREAS**, Developer is the owner of a certain tract of land in Columbia, Boone County, State of Missouri, described on Exhibit A attached hereto and incorporated herein by this reference (the "Developer Tract"); and

**WHEREAS**, the Parties are desirous of the Developer Tract becoming rezoned as described in the Application for the Permanent Rezoning of Property ("Rezoning") to which this Agreement is attached; and

**WHEREAS**, the City is desirous of there being made improvements to roadways and other infrastructure as shown on the Conley Road TDD, Columbia Missouri, Road Improvements for East Boulevard Extension plans dated September 11, 2009 incorporated herein by this reference (the "Plans").

**NOW, THEREFORE**, for and in consideration of the aforementioned facts which are incorporated in this Agreement and in consideration of the mutual exchange of covenants contained herein, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. **Definitions**: As used in this Agreement, the following terms have the following meanings:
  - a. "Act" means the Missouri Transportation Development District Act, Section 238.200 et seq. of the Revised Statutes of Missouri.
  - b. "City" means the City of Columbia, a municipal corporation and constitutional charter city under the laws of the State of Missouri, whose address is 701 East Broadway, Columbia, Missouri 65201.
  - c. "Contingency" means the condition precedent to this Agreement as described in paragraph 2 of this Agreement.
  - d. "Developer" means TKG Conley Road Investments, L.L.C., a Missouri limited liability company, whose address is 211 N. Stadium Blvd. Suite 201, Columbia, Missouri 65203.

e. “Letter of Credit” means a letter of credit securing payment to the City of a dollar amount determined pursuant to paragraph 4(d) of this Agreement. A Letter of Credit shall be provided to the City by the Developer or the TDD if paragraph 4(a)(iii) of this Agreement must be satisfied prior to the issuance by the City of a certificate of occupancy for a new building on the Developer Tract. Any Letter of Credit provided to the City hereunder shall be drawn upon by the City only for the purposes of paying for the construction costs required to complete any unfinished part of the work shown on the Plans as described in paragraph 4 of this Agreement.

f. “Phase 1 Work” means the construction work required to complete the improvements, in accordance with the Plans, which are within the highlighted areas of Phase 1 as shown on Exhibit B attached hereto and incorporated herein by this reference. Said highlighted areas are intended to show the general locations of the Phase 1 Work for the purposes of describing obligations that might exist with respect to a Letter of Credit.

g. “Phase 2 Work” means the construction work required to complete the improvements, in accordance with the Plans, within the highlighted areas of Phase 2 as shown on Exhibit B attached hereto. Said highlighted areas are intended to show the general locations of the Phase 2 Work for the purposes of describing obligations that might exist with respect to a Letter of Credit.

h. “TDD” means the Conley Road Transportation Development District, a Missouri transportation development district which was formed by a decree of the Circuit Court of Boone County, Missouri on December 9, 2005.

2. Contingency. The obligations in this Agreement shall be contingent upon the approval of the Rezoning. Unless the Contingency is satisfied, this Agreement shall not be applicable or effective. However, if the Contingency is satisfied then this Agreement shall be binding upon the Parties and their respective successors and assigns.

3. Obligations of Developer and TDD. Developer shall convey easements to the City shown on the Plans, as may be amended, which are located on the Developer Tract, at no charge to the City, at such time as may be necessary to complete the roadways and improvements shown on the Plans. Developer shall allow the TDD and the City access to the Developer Tract in order for each to perform their obligations described herein. In addition, Developer shall convey to the City trail easements (the “Trail Easements”) for the construction and maintenance by the City of a trail for pedestrian use within the Trail Easements (including ancillary uses by the City such as constructing fences, rails, landscaping, etc.). The Trail Easements shall be along the outermost, west, northwest, and north portions of the development on the Developer Tract. The precise locations of the Trail Easements shall be determined by the Developer and the City in conjunction with site development plan approvals for the Developer Tract. Such locations shall be adequate for the City’s purposes of constructing and maintaining a trail along the outside of the developed part of the Developer Tract. The locations of the Trail Easements and the proposed trail shall be commercially reasonable so as to not unreasonably or substantially limit or prohibit development of the Developer Tract as described herein. During any site development plan approval process under the then current City procedures required for approval of commercial development on the Development Tract, the following criteria and

examples shall be used by the City and Developer in determining the precise locations of the Trail Easements:

a. The Developer shall be required to convey the Trail Easements to the City upon approval by the City of a site plan for development of the Developer Tract, which has been submitted by the Developer.

b. The Trail Easements locations shall generally be along the west, northwest, and north borders of the Developer Tract and shall provide space for a single trail to be constructed and maintained (or a trail to be located in the case of the NW Corner Easement) by the City. Such a trail shall exist from the southwest corner of the Developer Tract, along the west boundary of the Developer Tract, and then turning to the northeast and then east along the northwest portion of the Developer Tract, and then along the north boundary of the Developer Tract to the intersection of the northeast boundary of the Developer Tract and the south boundary of the East Boulevard Extension as shown on the Plans.

c. The Trail Easements, which shall be located along the west boundary of the Developer Tract (the "West Easement"), shall be located as closely as reasonably possible to the west boundary of the Developer Tract so as to allow construction and maintenance by the City of a trail that is located west of the proposed development on the Developer Tract and to connect with the trail located within the NW Corner Easement.

d. The Trail Easements, which shall be located in the northwest portion of the Developer Tract (the "NW Corner Easement"), shall begin along the east side of the retaining wall, which will likely be constructed in the northwest portion of the Developer Tract (a potential location of said retaining wall is shown on Exhibit C, attached hereto), at the point where such retaining wall begins to curve to the northeast. The NW Corner Easement shall end at the same point as the eastern terminus of said retaining wall. The NW Corner Easement shall allow for a trail to be adjacent to and to the east, southeast, and south of said retaining wall and a portion of such trail shall be within the private drive or roadway that will likely be constructed to the east, southeast, and south of said retaining wall so as to avoid interfering with the development of the Developer Tract.

e. The Trail Easements, which shall be located along the north boundary of the Developer Tract (the "North Easement"), shall be located as closely as reasonably possible to the north boundary of the Developer Tract, so as to allow construction and maintenance by the City of a trail within the North Easement that connects with a trail within the NW Corner Easement. The North Easement shall be located immediately north of the commercially developed portion of the Developer Tract. It is likely that a private drive or roadway will be constructed in the north portion of the Developer Tract, which will connect with the East Boulevard Extension as shown on the Plans. In such case, the North Easement would be located immediately north of such private drive or roadway so as to allow construction and maintenance of a trail by the City and so as to avoid interfering with the development of the Developer Tract south of such private drive or roadway.

f. The Trail Easements shall be as wide as 14 feet and as narrow as 12 feet and the trails therein shall be as wide as 10 feet and as narrow as 8 feet. The following are descriptions of the three Trail Easements (West Easement, NW Corner Easement, and North Easement), which are likely to be granted to the City upon approval of a site plan for development on the Developer Tract:

i. The West Easement will likely be a standard, 14 foot-wide trail easement as is generally obtained by the City to allow the City to construct and maintain a 10 foot wide trail.

ii. The NW Corner Easement may be 14 feet or less in width and will likely contain a trail that is 8 feet in width. That trail will likely be in a “shared use” area that is also part of (and along the northern most part of, and adjacent to the curb of) the private drive or roadway that is constructed along the outer edge of the northwest corner of the development. Also, that trail will likely be designated as a trail by markings along the pavement of the private drive or roadway, as opposed to being a separately constructed, stand-alone trail located outside of the private drive or roadway.

iii. The West Easement will likely be no greater than 12 feet in width and shall contain an 8 foot wide trail (such as a “pedway”) that merges with the trail within the NW Corner Easement (such as by a slight slope down from the 8 foot wide trail to the area marked as a trail within the private drive or roadway within the NW Corner Easement) and such trail shall be immediately adjacent to the northern curb of the aforementioned private drive or roadway.

#### 4. Developer Tract Certificate of Occupancy.

a. Developer shall receive a certificate of occupancy under Section 29-37 of Chapter 29 of the Code of Ordinances of the City, as amended, for the first newly constructed building or buildings on the Developer Tract, only upon satisfaction of the conditions in paragraphs 4(a)(i) and either 4(a)(ii) or 4(a)(iii) of this Agreement as follows:

i. The City shall have received all of the easements and rights-of-way to the property owned by Columbia Missouri Investment Company (“CMIC”), which are necessary to construct the roadways and improvements on the CMIC property as shown on the Plans; and

ii. The roadways and improvements shown on the Plans shall be substantially complete; or

iii. In the event that the roadways and improvements shown on the Plans are not substantially complete because regulatory approvals have not been granted or necessary rights-of-way have not been obtained by the City or because



of a force majeure event, the Developer or TDD may provide the Letter of Credit to the City.

b. For the purposes of this paragraph 4, including determining satisfaction of the conditions in paragraphs 4(a)(ii) and 4(a)(iii) above as to the roadways and improvements, “substantially complete” shall mean construction of the roadways and improvements shown on the Plans in accordance with the City of Columbia Street and Storm Sewer Specifications and Standards, applicable at the time that the initial Intergovernmental Agreement was entered into between the City and the TDD, such that the improvements within the public right of way are ready for acceptance for public use and maintenance by the City or other applicable regulatory body.

c. For the purpose of determining whether a Letter of Credit must be provided to the City in exchange for a certificate of occupancy for a new building on the Developer Tract pursuant to this Agreement, a “force majeure event” shall mean any event beyond the control of the Developer or TDD, that delays or prevents the Developer or TDD from causing the roadways and improvements shown on the Plans from being substantially complete, despite the Developer’s or TDD’s reasonable efforts including, but not limited to acts of God, fire, casualty, unusually severe weather conditions, strikes, lockout, labor troubles, extraordinary inability to procure materials or supplies, failure of power, governmental authority, riots, insurrection, war, terrorism, or other causes or acts beyond the Developer’s or TDD’s control.

d. If, at the time when a certificate of occupancy for a new building on the Developer Tract is sought, the Phase 1 Work shall be substantially complete, but none of or only a portion of the Phase 2 Work is complete, the amount of a Letter of Credit shall be the lesser of: (i) Six Million and no/100 Dollars (\$6,000,000.00), or (ii) the estimated costs for completing the Phase 2 Work which would be incurred by the City in completing the remaining Phase 2 Work, which is not substantially complete. If, at such time, none of or only a portion of the Phase 1 Work and the Phase 2 Work is substantially complete, the amount of a Letter of Credit shall be the estimated costs for completing all of the remaining work shown on the Plans, which is not substantially complete and which would be incurred by the City. For the purposes of this paragraph 4(d), “estimated costs” shall be determined by the Director of the Department of Public Works of the City (the “Director”) as described herein. The Director shall use good faith and reasonable efforts to determine the estimated costs by obtaining accurate estimates for the completion of such work at the time when a Letter of Credit may become necessary in order for the City to issue a certificate of occupancy for a new building on the Developer Tract. The amount of such estimated costs must be commercially reasonable and consistent with costs associated with the then current construction costs for public roadway projects (e.g., unit costs for the construction work must be substantially similar to unit costs for other, recent and similar public roadway projects of the City). The Director shall request and receive bids from qualified contractors for the completion of such work pursuant to the Plans on behalf of the City (i.e., in compliance with applicable laws and regulations such as the Prevailing Wage Act) within sixty (60) days of the City receiving an application or other such valid request for a certificate of occupancy for a new building on the



Developer Tract. The amount of lowest and best bid received pursuant to the foregoing shall be the estimated costs.

5. City's Obligations.

a. The City shall approve the relocation of overhead wires between the Developer Tract and the tract immediately south of the Developer Tract, remove said wires, poles, and related infrastructure, and install new underground electric wires in conduits, manholes, and pull boxes installed by the Developer or TDD in accordance with the Plans.

b. The City shall grant 5% parking requirement reductions in accordance with Section 29-30 of Chapter 29 of the Code of Ordinances of the City, as amended in conjunction with the construction of a bus pull-off lane and bus stop shelter by the Developer or TDD as shown on the Plans.

c. The City shall adhere to the currently established utility relocation policy such that utilities located in existing right-of-way will be relocated, as necessary, by the utility owner and utilities located in existing easements will be relocated, as necessary, by the Developer or TDD.

d. The City shall issue a certificate of occupancy sought for a new building on the Developer Tract upon receiving a request for same in compliance with Section 29-37 of Chapter 29 of the Code of Ordinances of the City, as amended, and after the conditions in paragraph 4(a)(i) and either paragraphs 4(a)(ii) or 4(a)(iii) have been met (i.e., a certificate shall be issued after CMIC has conveyed its right of way to the City and either the work shown on the Plans is substantially complete or a Letter of Credit is provided to the City).

6. Severability and Waiver. Failure of any party to this Agreement to insist on the full performance of any of its provisions by the other Party shall not constitute a waiver of such performance unless the Party failing to insist on full performance of the provision declares in writing signed by it that it is waiving such performance. A waiver of any breach under this Agreement by any Party, unless otherwise expressly declared in writing, shall not be a continuing waiver or waiver of any subsequent breach of the same or other provision of this Agreement.

7. Governing Law. The laws of the State of Missouri (without regard to conflicts of law) shall govern the validity, construction, enforcement and interpretation of this Agreement.

8. Further Acts. In addition to the acts and deeds recited in this Agreement and contemplated to be performed, executed, and/or delivered under this Agreement, the Parties agree to perform, execute and/or deliver or cause to be delivered, executed and/or delivered all further acts, deeds, and assurances reasonably necessary to consummate the transactions contemplated hereby.

9. Headings. All section headings in this Agreement are for the convenience of the reader only and are not intended, nor shall they be deemed, to define or limit the scope of any provision of this Agreement.

10. Notices. All notices, demands, requests, and other communications required or permitted hereunder shall be in writing. All such notices, demands, requests and other communications (and copies thereof) shall be deemed to be delivered: (a) if sent by messenger, upon personal delivery to the Party to whom the notice is directed; (b) if sent by telecopier, upon electronic or telephonic confirmation of receipt from the receiving telecopier; (c) if sent by reputable overnight courier, with request for next business day delivery, on the next business day after sending; or (d) whether actually received or not, two (2) business days after deposit in a regularly maintained receptacle for the United States mail, registered or certified, return receipt requested, postage prepaid, addressed as follows (or to such other address as the Parties may specify by notice given pursuant to this section):

TO DEVELOPER:	TKG Conley Road Investments, L.L.C. 211 N. Stadium Blvd. Suite 201, Columbia, MO 65203
WITH A COPY TO:	Van Matre, Harrison, Hollis, Taylor, and Bacon, P.C. c/o Robert N. Hollis 1103 East Broadway P.O. Box 1017 Columbia, MO 65201
TO TDD:	Conley Road Transportation Development District c/o Van Matre, Harrison, Hollis, Taylor, and Bacon, P.C. 1103 East Broadway P.O. Box 1017 Columbia, MO 65201
TO CITY:	City of Columbia 701 E. Broadway P.O. Box 6015 Columbia, MO 65205
WITH A COPY TO:	City of Columbia c/o Fred A. Boeckmann 701 E. Broadway P.O. Box N Columbia, MO 65205
TO CMIC:	Columbia Missouri Investment Company 2210 Country Club Drive Columbia, MO 65201

WITH A COPY TO:

Brown, Willbrand, Simon, Powell & Lewis, P.C.  
c/o B. Daniel Simon  
601 E. Broadway, Ste. 203  
P.O. Box 1304  
Columbia, MO 65205

The Parties agree that a copy of any notice sent to another Party pursuant to this paragraph 10, shall be sent to CMIC and its attorney at the addresses listed above.

11. Exhibits. The Exhibits that are referenced in and attached to this Agreement are incorporated in, and made a part of, this Agreement for all purposes.

12. Transportation Project Costs. Notwithstanding any provision of this Agreement to the contrary, nothing contained herein shall prohibit or limit, in any manner, the TDD from complying with the judgment, order, and decree of the Circuit Court of Boone County, Missouri, dated December 9, 2005, which formed the TDD, to fund, construct, or complete any transportation project, as such term is defined in the Act.

13. No Adverse Inference. This Agreement shall not be construed more strongly against one Party or the other. The Parties had equal access to input with respect to, and influence over, the provisions of this Agreement. Accordingly, no rule of construction which requires that any allegedly ambiguous provision be interpreted more strongly against one Party than the other shall be used in interpreting this Agreement.

14. Entire Contract and Modification. This Agreement sets forth all the promises, covenants, agreements, conditions, and understandings between the Parties and supersedes all prior and contemporaneous agreements and understandings, inducements, or conditions, expressed or implied, oral or written, except as herein contained. This Agreement may be modified only by an agreement in writing signed by the Parties.

15. Third Party Beneficiary. Columbia Missouri Investment Company, a Missouri non-profit corporation is intended to be a third-party beneficiary to this Agreement.

**[REMAINDER OF PAGE LEFT BLANK – SIGNATURE PAGE TO FOLLOW]**

IN WITNESS WHEREOF, the Parties have duly executed and delivered this Agreement as of the date first above written.

**City of Columbia, Missouri (“City”)**

By: \_\_\_\_\_  
Mike Matthes, City Manager

Attest:

By: \_\_\_\_\_  
Sheela Amin, City Clerk

Approved as to form:

By: \_\_\_\_\_  
Fred Boeckmann, City Counselor

**TKG Conley Road Investments, L.L.C.  
 (“Developer”)**

By: \_\_\_\_\_  
\_\_\_\_\_, Authorized Agent

**Conley Road Transportation  
Development District (“TDD”)**

By: \_\_\_\_\_  
Hiram Watson, Chairman of the  
Board of Directors

Attest:

\_\_\_\_\_  
Michael Link, Secretary  
of the Board of Directors

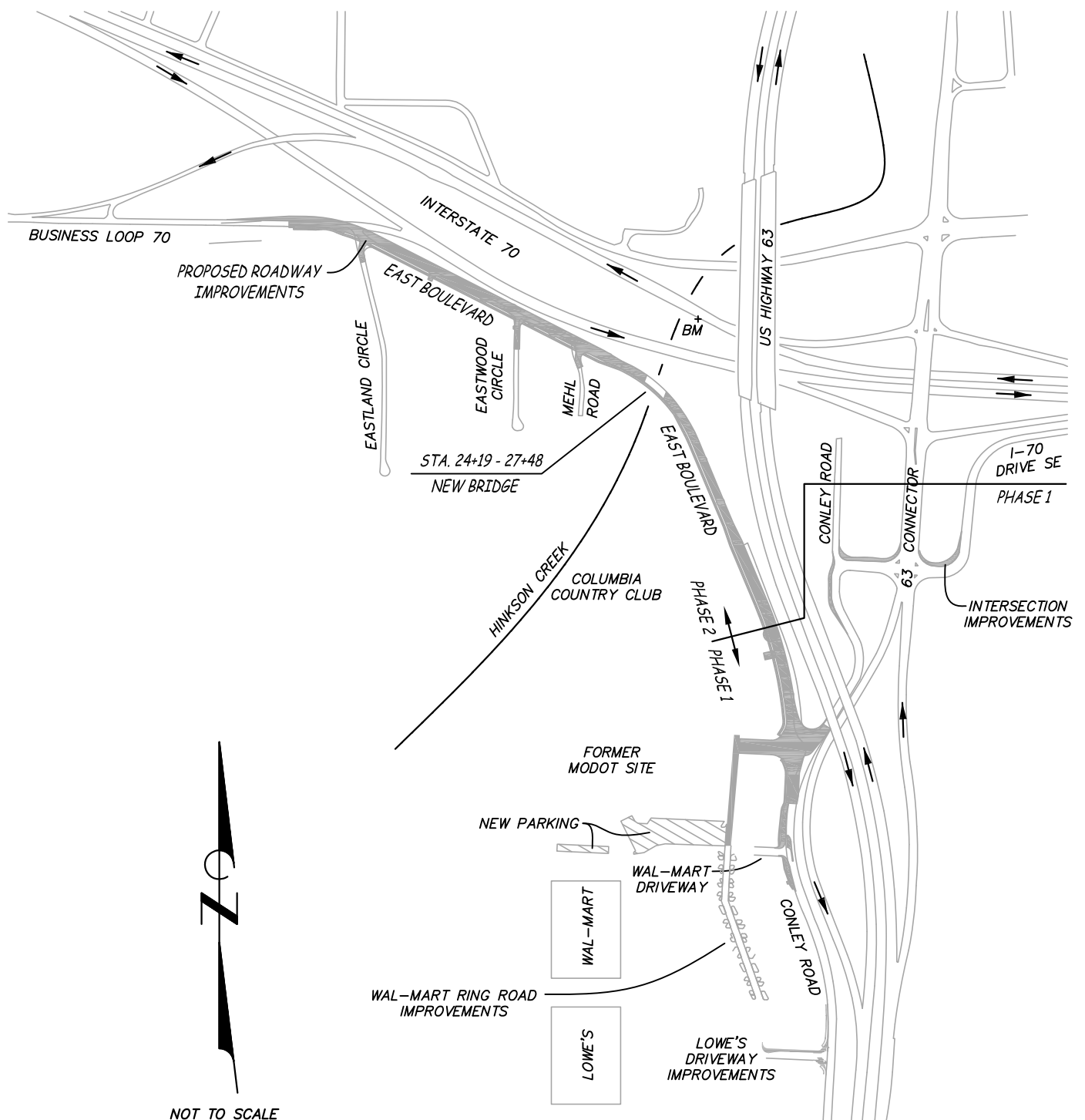
## **EXHIBIT A**

### **Developer Tract**

Beginning at the Northwest Corner of the Northeast Quarter of the Southwest Quarter of Section 8-48-12, also being the Northwest corner of Lot 3A of the administrative plat of Lot 1 Broadway Marketplace, Lot 1 Lowe's Subdivision, Lot 1 Wal-Mart Stores Plat No. 1, recorded in Book 2339, Page 81, and the Southwest Corner of Tract #1 of Boone County Survey #7601 of the Sanford F. Conley, Jr. Subdivision, thence N 1° 21'20"E, along the westerly line of said subdivision, 767.88 feet to the north line of the south half of Tract #3 of said subdivision; thence S 87° 25'00"E, along said line, 992.18 feet to the Southeast corner of Lot 1 Konstantin Subdivision, also being the westerly line of the Conley Road right-of-way, described by a Quit-Claim Deed recorded in Book 1231, Page 955; thence along said right-of-way, S 18° 33'10"E 21.30 feet; thence S 16° 49'20" E 140.44 feet; thence S 4° 00'00"E 187.54 feet; thence S 8° 55'50"W 123.66 feet; thence S 7° 36'00"W 155.26 feet; thence S 4° 27'40" E 152.53 feet to the Northeast corner of Lot 3A of the administrative plat of Lot 1 Broadway Marketplace, Lot 1 Lowe's Subdivision, Lot 1 Wal-Mart Stores Plat No. 1, also being the southerly line of Tract #2 of Boone County Survey #7601 of the Sanford F. Conley, Jr. Subdivision and the ¼ section line; thence N 87° 25'30"W, along said line and the southerly line of said Tract #1, 1,043.04 feet to the beginning and containing 18.31 acres.

## **EXHIBIT B**

### **Phase 1 Work and Phase 2 Work**



**Engineering Surveys & Services**

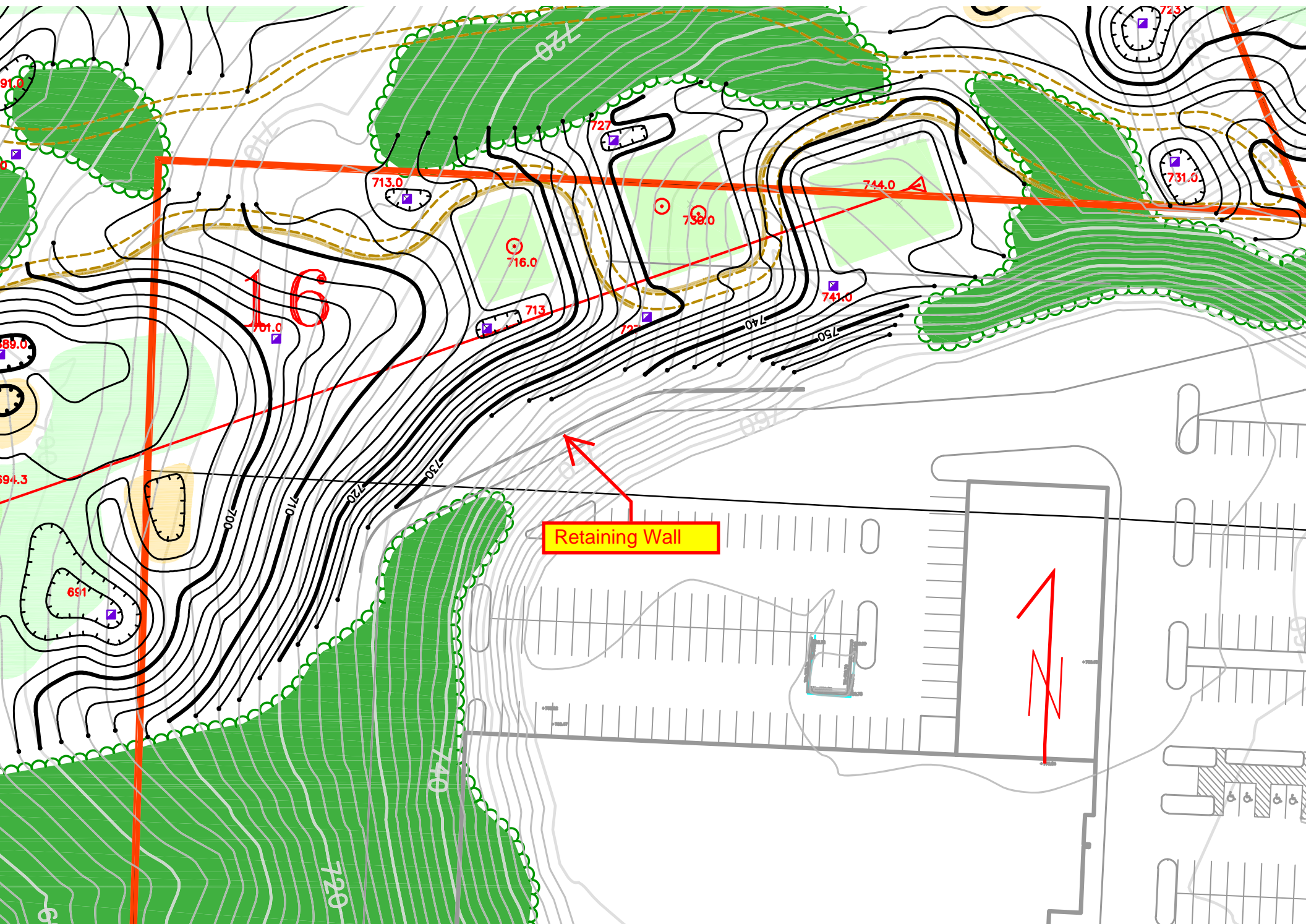
1113 Fay Street  
Columbia, Missouri  
573 - 449 - 2646

Missouri Engineering Corporation # 2004005018

## **EXHIBIT C**

### **Retaining Wall Location**





**AGENDA REPORT  
PLANNING AND ZONING COMMISSION MEETING  
FEBRUARY 18, 2010**

**SUMMARY**

A request by TKG Conley Road, LLC (owner) to rezone approximately 18.31 acres from R-1 (one-family dwelling) to C-P (planned business). The property is located on the former MoDOT site north of Wal-Mart on Conley Road. **(Case 09-124)**

**REQUESTED ZONING**

C-P (Planned Business District), with the following development restrictions identified in the applicant's Statement of Intent:

<b>a. Proposed uses</b>	All C-3 uses
<b>b. Maximum gross building floor area</b>	200,000 sq. ft.
<b>c. Maximum building height</b>	45 ft., but may exceed 45 feet if additional setback (one foot per one foot of height over 45 feet) is provided in all yards
<b>d. Minimum maintained open space (% of total site)</b>	15 percent

**SITE CHARACTERISTICS**

<b>Area (acres)</b>	18.31
<b>Address</b>	Conley Road
<b>Topography</b>	Steep relief to north and west; moderate drop toward east
<b>Vegetation</b>	Trees predominant on northern, western, and southern sides
<b>Watershed</b>	Hinkson Creek

**SITE HISTORY**

<b>Annexation date</b>	1962
<b>Initial zoning designation</b>	R-1, 1962
<b>Previous rezoning requests</b>	N/A
<b>Land Use Plan designation</b>	Commercial
<b>Existing use(s)</b>	Vacant MoDOT facilities
<b>Existing zoning</b>	R-1

**SURROUNDING LAND USES**

<b>Orientation from site</b>	<b>Zoning District</b>	<b>Land use</b>
North	C-P/R-1	Residential/Columbia Country Club golf course
South	C-3	Wal-Mart
East	N/A	Highway 63
West	R-1	Columbia Country Club golf course

## UTILITIES & SERVICES

<b>Sanitary Sewer</b>	City of Columbia
<b>Water</b>	City of Columbia
<b>Electric</b>	City of Columbia
<b>Fire Protection</b>	City of Columbia

## ACCESS

<b>Conley Road</b>	
<b>Location</b>	Eastern boundary
<b>Major Roadway Plan classification</b>	Major Collector
<b>Capital Improvement Program projects</b>	Description: East Blvd. to Conley Road Cost: N/A Timeline: 10+ years

## PARKS & RECREATION

<b>2008 Neighborhood Parks Plan</b>	Stephens Lake Park
<b>2008 Trails Plan</b>	Primary trail along Hinkson Creek
<b>Bicycle/Pedestrian Network Plan</b>	"PedNet Backbone Proactive Pedway" along Hinkson Creek

## PUBLIC NOTIFICATION

All property owners within 200 feet and City-recognized neighborhood associations within 1,000 feet of the boundaries of the subject property were notified by postcard of a public information meeting, which was held on December 14, 2009

<b>Public information meeting recap</b>	Number of attendees: 12 (including TKG's representative) Comments/concerns: Several, highlighted by concerns about Conley Road extension, buffering between proposed use and golf course, and use of Transportation Development District (TDD) funds to compensate golf course for lost property; TDD terms called for a portion of the MoDOT site to be used for the golf course
<b>Neighborhood Association(s) notified</b>	East Walnut, Country Club Estates
<b>Correspondence received</b>	Numerous inquiries from Columbia Country Club members/nearby residents

## DISCUSSION

The petitioner is requesting C-P zoning, with all C-3 uses on the subject site. No development plans have been submitted with the application; however, a "conceptual" layout (attached) of future construction has been provided to assist in addressing several traffic circulation issues raised during the proposal's concept review. Adjacent zoning, north and south of the subject site, is mixture of C-P

and C-3 uses. R-1 zoning is immediately to the west and is improved with the Columbia Country Club. To the east is the US Highway 63 right-of-way.

The proposed zoning would permit uses consistent with the adjacent properties to the north and south. The proposed C-P is consistent with the recommended "Commercial District" designation of the Metro 2020 Plan. The site features several former MoDOT buildings that would be demolished. Upon submission of a final development plan, the redeveloped site would be subject to all C-P standards related to parking, landscaping/buffering, and stormwater as well as other pertinent site/building regulations.

As required by Section 29-17(e), the petitioner has submitted the required Statement of Intent for the requested C-P designation (attached). The statement of intent lists all C-3 uses, a maximum gross building square footage of 200,000 sq. ft., a maximum building height of 45-feet, which may be exceeded if additional setback is provided in all yards, and a minimum open space of 15 percent as governing future site development. Additionally, the petitioner has submitted a development agreement (attached) which proposes the establishment of a 0.89 acre buffer easement in the northwest corner of the site, the provision of a Parks and Recreation trail easement along the western boundary of the site, and an allocation of responsibilities for future on-site and off-site roadway/utility improvements. This assignment of responsibilities for the relocation of utilities is not supported by the City Water and Light Department.

The proposed C-P zoning for the site is considered an appropriate future designation based on the site's contextual location. Based on its context, development under the R-1 designation is not appropriate or likely and is inconsistent with the Metro 2020 future land use designation. Future use of this site for commercial purposes, however, requires consideration of several factors. The site is part of a comprehensive traffic study involving the current Broadway Crossings development and surrounding roadway network, it has recently been brought into the Conley Road Transportation Development District (TDD), established in 2005, and has been the focus of ongoing discussions between the petitioner and Columbia Country Club related to the future extension of Conley Road.

In addition to the TDD, the site is subject to an intergovernmental cooperation agreement between the TDD, the developers, and the City, approved by ordinance in February, 2006, and amended in May, 2006. This agreement enumerates 20 "transportation projects" to be undertaken by the TDD; twelve of these (not counting the final two, which are broad engineering and general fee catch-all provisions) are related to the construction and improvements of the Conley Road extension. Section 3.1 of this agreement explicitly states that "The city, the Developers, and the District acknowledge and agree that the District was created solely for the purpose of funding and promoting the construction of the Transportation Projects."

### **Traffic considerations**

The subject site's primary access will be provided via Conley Road, a City maintained major collector. The CATSO 2030 Plan and the City's MRP show Conley Road as being extended to connect with East Blvd. and Business Loop 70. The applicant has indicated several times during review of this proposal that, it does not believe connection of the roadway is necessary or warranted and has proposed "upgrading" existing improvements in lieu of the full connection. The City does not support this position, nor is it considered consistent with the provisions of the approved TDD decree or intergovernmental cooperation agreement.

To support this change in proposed system improvements, the petitioner submitted an addendum to the 2007 traffic study for the Broadway Crossings development. The addendum did not address all issues associated with the removal of the Conley Road extension and was requested to be further revised. The Public Works Department has reviewed the revised traffic study and does not concur with the new study's assertions regarding future traffic flows and levels of service. That department, therefore, does not believe the new development may be built out without the addition of the Conley Road extension to East Blvd./Business Loop 70. Planning staff concurs with this recommendation and does not support build-out without the Conley Road-East Blvd. extension.

The Improve I-70 preferred alternative (I-70 Environmental Impact Study) for the expansion of Interstate 70 and its interchanges and support roads further contributes to the difficulty of acquisition of right-of-way for the Conley Road extension, as the location of a proposed ramp lane connecting eastbound I-70 traffic to the southbound lanes of U.S. 63 occupies the space in which the original Conley Road extension was to run, per the Major and CATSO Roadway Plans. Consequently, a larger swath of land is necessary to be acquired from the Columbia Country Club's golf course to complete the Conley Road extension improvements. The Improve I-70 EIS was published before the formation of the Conley Road TDD.

#### **Transportation Development District considerations**

The applicant has stated that the rezoning proposal is not subject to the requirements of Exhibit C since it believes the extension of Conley Road is not required, per the findings of the updated traffic study. Staff asserts that the improvements specified as part of the TDD and Exhibit C indicate that the primary purpose for the establishing the TDD was to facilitate the extension of Conley Road, as several items enumerated in the court decree relate to this action. Staff does not believe that the TDD has been subsequently revised to remove this or any other project to be undertaken and any action to do so would require the consent of both the City and MoDOT.

The City Traffic Engineer has recommended that both the intersection improvements outlined in the revised traffic study and the extension of Conley Road be completed to support future traffic flows in the area. These projects would be funded by TDD tax dollars, which the Conley Road TDD has been collecting since 2006.

#### **Buffering**

The petitioner has proposed a buffer area in the northwest corner of the subject site totaling 0.89 acres. The purpose of this buffer is to address concerns raised by the Columbia Country Club relating to the visual impact the future development of the site may have on their members' enjoyment of the golf course. The proposed buffer is in an area of steep relief adjacent to and containing approximately 30 feet of fall to the golf course's 16<sup>th</sup> hole. The total fall from the plateau at the former MoDOT maintenance yard to the 16<sup>th</sup> fairway is approximately 60 feet. From the maintenance yard to the banks of Hinkson Creek, there is approximately 114 feet of fall. The hill is heavily populated with trees and scrub brush.

The westernmost portion of the proposed buffer is a potential route for a segment of the Hinkson Creek trail. Should the trail be built in this general location it would likely necessitate the construction of a retaining wall, thereby eliminating the intended purpose of the easement. During the concept review, staff recommended that a more appropriate method of addressing buffer concerns would be to identify a "conservation easement" along the western property line. Such easement could serve three functions – a protected buffer, a trail easement, and the required setback. The buffering, as

presently proposed, is not acceptable. The issue of buffering and land use compatibility will be revisited when a C-P development plan is submitted for review.

### STAFF RECOMMENDATION

Staff recommends approval of the rezoning application, excepting the applicant's development agreement as submitted. This would entitle the subject site to be improved as outlined in the applicant's statement of intent. The potential impact, however, of such a land use change may overwhelm the adjacent infrastructure and negatively impact adjacent properties.

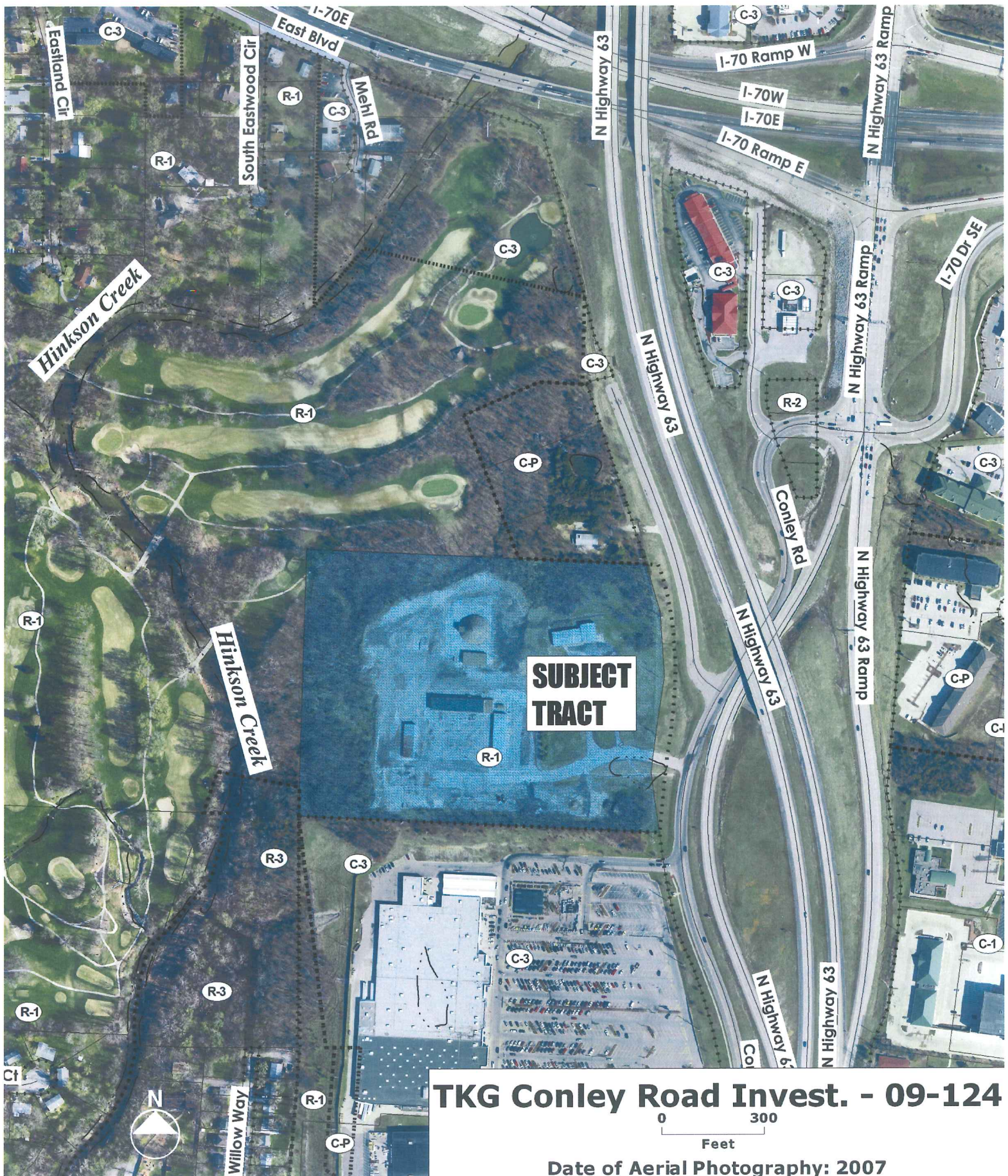
Without the installation of additional roadway infrastructure, specifically intersection improvements and the extension of Conley Road, the area will not support the type of growth sought by the applicant. Additionally, improvements to protect adjacent properties, such as enhanced buffering, must be considered in a manner more effective than those proposed in the applicant's development agreement. As such, staff would recommend the following additional conditions in its recommendation of approval of the applicant's requested rezoning:

1. The recommended intersection improvements outlined by the January, 2010, traffic study for the area shall be constructed and the complete right-of-way necessary for the extension of Conley Road to East Blvd./Business Loop 70 shall be acquired and granted to the City concurrent with the submittal of the first development plan. Upon development plan approval, the applicant may improve up to 30,000 square feet of building construction in this first phase without triggering the construction of the Conley Road extension to East Blvd./Business Loop 70
2. Subsequent development beyond the improvements outlined in the first development plan or building improvements over 30,000 square feet shall require the construction of the Conley Road extension and all other related transportation projects as enumerated in the TDD decree and/or the Intergovernmental Cooperation Agreement. Should the applicant believe these projects are not necessary, a revised traffic study showing current traffic conditions may be submitted to the City for consideration. Should the City disagree with the findings of the study and conclude the road is necessary to handle those projected traffic flows, the projects shall be completed before the issuance of a temporary or permanent certificate of occupancy for the new or expanded facility
3. Prior to any land disturbance activities, the applicant shall establish, by plat, a conservation easement along the site's northern and western boundaries to ensure preservation of the natural screen between it and the country club property as well as accommodate the future Hinkson Trail connection. The width of such easement shall be no less than 50' and shall be dedicated to public use

Report prepared by ML

Approved by TRZ

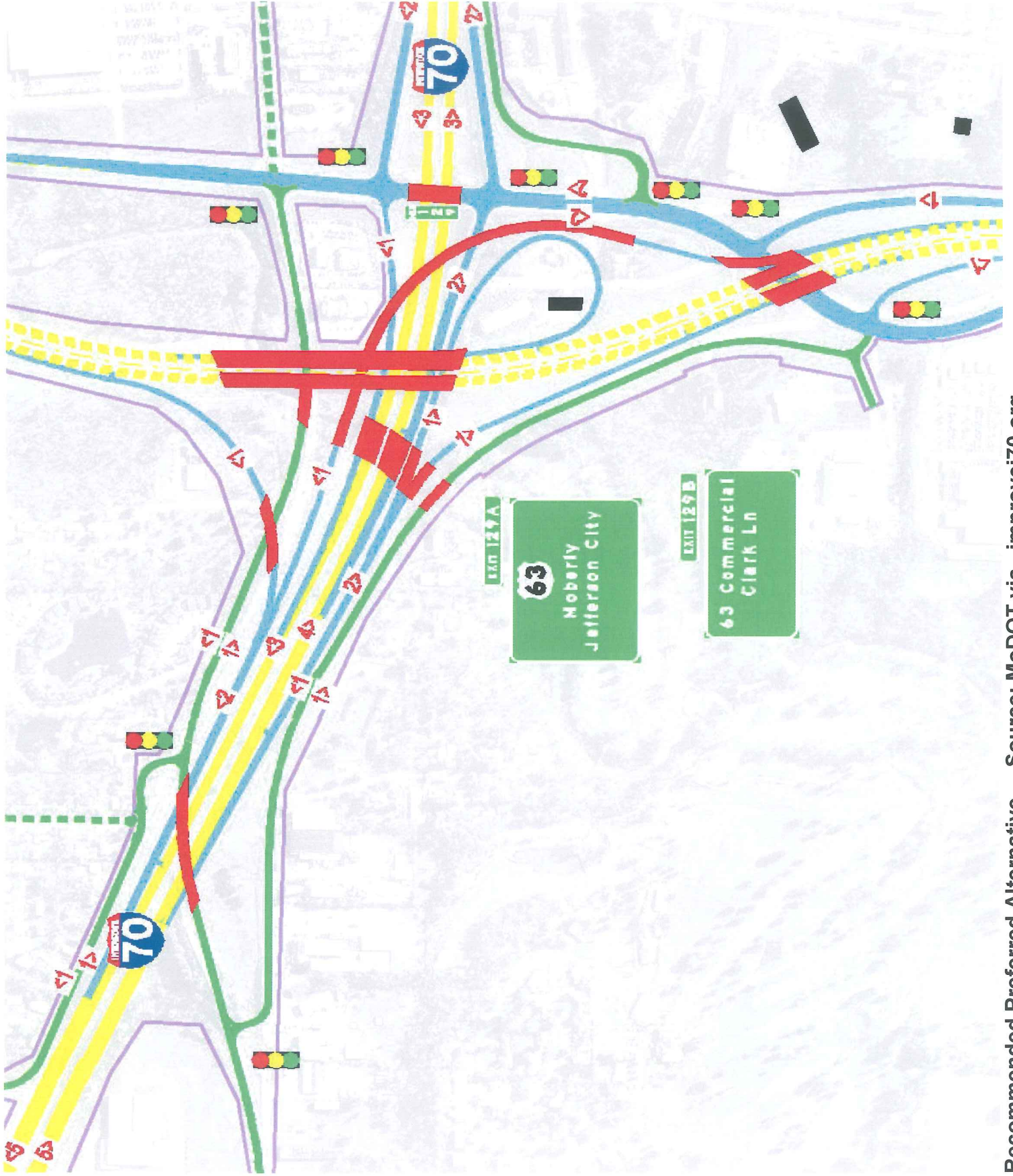




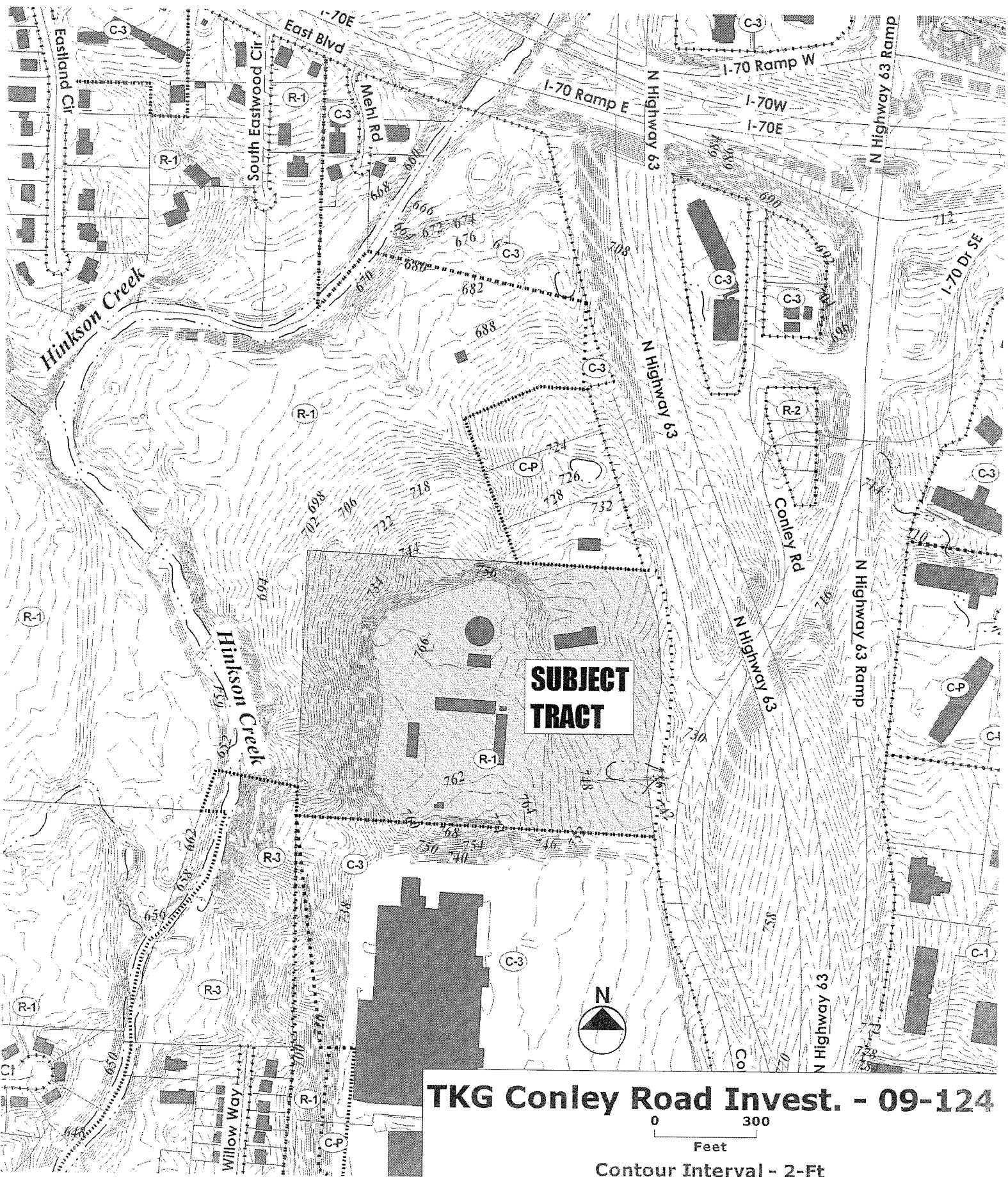
**TKG Conley Road Invest. - 09-124**

**Date of Aerial Photography: 2007**









**TKG Conley Road Invest. - 09-124**

0 300

Feet

Contour Interval - 2-Ft

**VAN MATRE, HARRISON, AND HOLLIS, P.C.**

A PROFESSIONAL CORPORATION

ATTORNEYS AND COUNSELORS AT LAW

1103 EAST BROADWAY

POST OFFICE BOX 1017

COLUMBIA, MISSOURI 65201

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GARRETT S. TAYLOR  
KATHLEEN D. PITZER\*\*  
ERICK S. CREACH  
BRYAN C. BACON\*

\*\*ADMITTED IN MISSOURI, ILLINOIS, AND WASHINGTON, D.C.

EVERETT S. VAN MATRE  
(1922-1998)

November 30, 2009

Matthew Lepke, AICP Planner  
City of Columbia  
Planning and Development  
701 East Broadway  
Columbia, MO 65201

*Via Hand Delivery and E-mail: [mjlepke@gocolumbiamo.com](mailto:mjlepke@gocolumbiamo.com)*

Re: Amendment to the Application for the Permanent Re-zoning of Property (the "Application")/TKG Conley Road Investments, LLC

Dear Matthew,

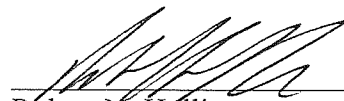
Please find accompanying this letter, an amended Development Agreement and a Statement of Intent that would have been necessary had the original Application been an application for C-P as opposed to C-3 zoning. In that regard, please consider the Application modified such that it requests C-P zoning in accordance with the attached Statement of Intent and Development Agreement.

Should you have questions or comments, please contact me at your earliest convenience. With respect to the Easement exhibit to the Development Agreement, I will provide it as soon as possible.

Very truly yours,

Van Matre, Harrison, and Hollis, P.C.

By:

  
Robert N. Hollis

RNH/djd  
CC: Tim Teddy  
Patrick Zenner

**RECEIVED**

**NOV 30 2009**

**PLANNING DEPT.**

### Statement of Intent

1. **Requested Zoning:** The Owner requests the Property be zoned C-P under the City's zoning ordinances.

2. **Statement of Intent Required by Section 29-17(e)(2):** In accordance with the requirements of Section 29-17(e)(2), the following "Statement of Intent" is hereby furnished, to-wit:

a. The uses proposed for the Property shall be all uses permitted under Zoning District C-3 (Section 29-16) of the City's zoning ordinances.

b. The maximum gross square feet of building floor area is 200,000.

c. The maximum building height shall not be over forty-five (45) feet, except that the height may exceed forty-five (45) feet provided that for each additional foot of height, one additional foot of setback shall be provided for all yards.

d. The minimum percentage of the Property to be maintained in open space is 15%.

## Development Agreement

THIS DEVELOPMENT AGREEMENT ("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2009, by and among **TKG Conley Road Investments, L.L.C.**, a Missouri limited liability company (the "Developer"), and the **Conley Road Transportation Development District**, a Missouri transportation development district (the "TDD"), and the **City of Columbia**, a municipal corporation (the "City"), (Developer, TDD, and City collectively hereinafter referred to as the "Parties" or "Party" as may be the case).

### WITNESSETH

**WHEREAS**, Developer is the owner of a certain tract of land in Columbia, Boone County, State of Missouri, described on **Exhibit A** attached hereto and incorporated herein by this reference (the "Developer Tract"); and

**WHEREAS**, the Parties are desirous of the Developer Tract becoming rezoned as described in the Application for the Permanent Rezoning of Property ("Rezoning") to which this Agreement is attached; and

**WHEREAS**, the City is desirous of there being made improvements to roadways and other infrastructure as shown on the Conley Road TDD, Columbia Missouri, Road Improvements for East Boulevard Extension plans dated September 11, 2009 incorporated herein by this reference (the "Plans"); and

**WHEREAS**, the Parties are desirous of entering into this Agreement to bind the Parties with regard to the completion of certain infrastructure and the related obligations shown on the Plans.

**NOW, THEREFORE**, for and in consideration of the aforementioned facts which are incorporated in this Agreement and in consideration of the mutual exchange of covenants contained herein, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. Definitions: As used in this Agreement, the following terms have the following meanings:

a. "Act" means the Missouri Transportation Development District Act, Section 238.200 et seq. of the Revised Statutes of Missouri.

b. "City" means the City of Columbia, a municipal corporation and constitutional charter city under the laws of the State of Missouri, whose address is 701 East Broadway, Columbia, Missouri 65201.

c. "Contingency" means the condition precedent to this Agreement as described in paragraph 2 of this Agreement.

d. "Developer" means TKG Conley Road Investments, L.L.C., a Missouri limited liability company, c/o R. Otto Maly, 2200 Forum, Suite 105, Columbia, MO 65203.

e. "TDD" means the Conley Road Transportation Development District, a Missouri transportation development district which was formed by a decree of the Circuit Court of Boone County, Missouri on December 9, 2005.

f. "TIS" means that certain Traffic Impact Study completed by Crawford, Bunte, and Brammeier, dated \_\_\_\_\_, as amended on June 11, 2009 related to the Developer Tract and surrounding roadway network.

g. "Trails" means the trails shown on the depiction attached hereto as **Exhibit B** and incorporated herein by this reference.

2. Contingency. The obligations in this Agreement shall be contingent upon the approval of the Rezoning. Unless the Contingency is satisfied, this Agreement shall not be applicable or effective. However, if the Contingency is satisfied then this Agreement shall be binding upon the Parties and their respective successors.

3. Obligations of Developer and TDD.

a. Developer shall convey easements to the City identified on **Exhibit C**, attached hereto and incorporated herein by this reference, as "Easements to City", at no charge to the City, that are necessary to accommodate the improvements identified on the Plans and shall allow the TDD and the City access to the Developer's property in order for each to perform their obligations described herein. Included in the "Easements to City" shall be the buffer area between the Developer Tract and the property adjacent to same to the west as shown on **Exhibit C**. Said "Easements to City" shall be conveyed prior to Developer obtaining building permits for any structures on the Developer Tract.

b. Except for the City's obligations described herein, the TDD and/or Developer shall complete the improvements identified on the Plans as "Phase 1" in accordance with the TIS recommendations. In completing its improvements shown on the Plans, the TDD shall comply with the Prevailing Wage Act of Missouri.

c. To the extent that the Trails are located on the Developer Tract or the property adjacent to the Developer Tract which is under similar ownership to the Owner, the TDD and/or Developer shall convey easements necessary for the future construction and maintenance of the Trails, subject to Owner having authority to convey said easements and subject to Trails relocation if it is commercially unreasonable to locate the Trails as shown on **Exhibit B**.

d. Developer shall not request a certificate of occupancy for any structure on the Developer Tract until it or the TDD shall have completed its obligations to make the improvements identified as "Phase 1" on the Plans.

4. City's Obligations.

a. The City shall approve the relocation of overhead wires between the Developer Tract, remove said wires, poles, and related infrastructure, and install new underground electric wires in conduits, manholes, and pull boxes installed by the Developer or TDD in accordance with the Plans.

b. The City shall grant 5% parking requirement reductions in accordance with section 29-30 of the Code in conjunction with the construction of a bus pulloff lane and bus stop shelter by the Developer or TDD.

c. The City shall pay (or reimburse the Developer or TDD) for the cost of street lights installed adjacent to new roadways constructed by the Developer or TDD pursuant to this Agreement.

d. The City shall adhere to the currently established utility relocation policy such that utilities located in existing right-of-way will be relocated, as necessary, by the utility owner and utilities located in existing easements will be relocated, as necessary, by the Developer or TDD.

5. Severability and Waiver. Failure of any party to this Agreement to insist on the full performance of any of its provisions by the other Party shall not constitute a waiver of such performance unless the Party failing to insist on full performance of the provision declares in writing signed by it that it is waiving such performance. A waiver of any breach under this Agreement by any Party, unless otherwise expressly declared in writing, shall not be a continuing waiver or waiver of any subsequent breach of the same or other provision of this Agreement.

6. Governing Law. The laws of the State of Missouri (without regard to conflicts of law) shall govern the validity, construction, enforcement and interpretation of this Agreement.

7. Further Acts. In addition to the acts and deeds recited in this Agreement and contemplated to be performed, executed, and/or delivered under this Agreement, the Parties agree to perform, execute and/or deliver or cause to be delivered, executed and/or delivered all further acts, deeds, and assurances reasonably necessary to consummate the transactions contemplated hereby.

8. Headings. All section headings in this Agreement are for the convenience of the reader only and are not intended, nor shall they be deemed, to define or limit the scope of any provision of this Agreement.

9. Notices. All notices, demands, requests, and other communications required or permitted hereunder shall be in writing. All such notices, demands, requests and other communications (and copies thereof) shall be deemed to be delivered: (a) if sent by messenger, upon personal delivery to the party to whom the notice is directed; (b) if sent by telecopier, upon

electronic or telephonic confirmation of receipt from the receiving telecopier; (c) if sent by reputable overnight courier, with request for next business day delivery, on the next business day after sending; or (d) whether actually received or not, two (2) business days after deposit in a regularly maintained receptacle for the United States mail, registered or certified, return receipt requested, postage prepaid, addressed as follows (or to such other address as the Parties may specify by notice given pursuant to this section):

TO DEVELOPER:	TKG Conley Road Investments, L.L.C. Attention: R. Otto Maly 2200 Forum Blvd., Ste. 105 Columbia, MO 65203 Facsimile: 573-875-1286
WITH A COPY TO:	Van Matre, Harrison, Volkert, and Hollis, P.C. 1103 East Broadway P.O. Box 1017 Columbia, MO 65201 Attention: Robert Hollis, Esq. Facsimile: 573-875-0017
TO TDD:	Conley Road Transportation Development District c/o Van Matre, Harrison, Volkert, and Hollis, P.C. 1103 East Broadway P.O. Box 1017 Columbia, MO 65201
TO CITY:	City of Columbia 701 E. Broadway P.O. Box 6015 Columbia, MO 65205
WITH A COPY TO:	City of Columbia c/o Fred A. Boeckmann 701 E. Broadway P.O. Box N Columbia, MO 65205

10. Exhibits. The Exhibits that are referenced in and attached to this Agreement are incorporated in, and made a part of, this Agreement for all purposes.

11. Transportation Project Costs. Notwithstanding any provision of this Agreement to the contrary, nothing contained herein shall prohibit or limit, in any manner, the TDD from complying with the judgment, order, and decree of the Circuit Court of Boone County, Missouri, dated December 9, 2005, which formed the TDD, to fund, construct, or complete any transportation project, as such term is defined in the Act.

12. No Adverse Inference. This Agreement shall not be construed more strongly against one Party or the other. The Parties had equal access to input with respect to, and influence over, the provisions of this Agreement. Accordingly, no rule of construction which requires that any allegedly ambiguous provision be interpreted more strongly against one party than the other shall be used in interpreting this Agreement.

13. Entire Contract and Modification. This Agreement sets forth all the promises, covenants, agreements, conditions, and understandings between the parties hereto and supersedes all prior and contemporaneous agreements and understandings, inducements, or conditions, expressed or implied, oral or written, except as herein contained. This Agreement may be modified only by an agreement in writing signed by the Parties.

[Signature Page Follows]



IN WITNESS WHEREOF, the parties have duly executed and delivered this Agreement as of the date first above written.

**City of Columbia, Missouri ("City")**

By: \_\_\_\_\_  
H. William Watkins, City Manager

Attest:

By: \_\_\_\_\_  
Sheela Amin, City Clerk

Approved as to form:

By: \_\_\_\_\_  
Fred Boeckmann, City Counselor

**TKG Conley Road Investments, L.L.C.**  
("Developer")

By: \_\_\_\_\_  
R. Otto Maly, Authorized Agent

**Conley Road Transportation  
Development District ("TDD")**

By: \_\_\_\_\_  
Hiram Watson, Chairman of the  
Board of Directors

Attest:

\_\_\_\_\_  
Michael Link, Secretary  
of the Board of Directors

EXHIBIT A

DEVELOPER TRACT

BEGINNING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8-48-12, ALSO BEING THE NORTHWEST CORNER OF LOT 3A OF THE ADMINISTRATIVE PLAT OF LOT 1 BROADWAY MARKETPLACE, LOT 1 LOWE'S SUBDIVISION, LOT 1 WAL-MART STORES PLAT NO. 1, RECORDED IN BOOK 2339 PAGE 81, AND THE SOUTHWEST CORNER OF TRACT # 1 OF BOONE COUNTY SURVEY #7601 OF THE SANFORD F. CONLEY, JR. SUBDIVISION, THENCE N 1°21'20"E, ALONG THE WESTERLY LINE OF SAID SUBDIVISION, 767.88 FEET TO THE NORTH LINE OF THE SOUTH HALF OF TRACT # 3 OF SAID SUBDIVISION; THENCE S 87°25'00"E, ALONG SAID LINE, 992.18 FEET TO THE SOUTHEAST CORNER OF LOT 1 KONSTANTIN SUBDIVISION, ALSO BEING THE WESTERLY LINE OF THE CONLEY ROAD RIGHT-OF-WAY, DESCRIBED BY A QUIT CLAIM DEED RECORDED IN BOOK 1231 PAGE 955; THENCE ALONG SAID RIGHT-OF-WAY, S 18°33'10"E 21.30 FEET; THENCE S 16°49'20"E 140.44 FEET; THENCE S 4°00'00"E 187.54 FEET; THENCE S 8°55'50"W 123.66 FEET; THENCE S 7°36'00"W 155.26 FEET; THENCE S 4°27'40"E 152.53 FEET TO THE NORTHEAST CORNER OF LOT 3A OF THE ADMINISTRATIVE PLAT OF LOT 1 BROADWAY MARKETPLACE, LOT 1 LOWE'S SUBDIVISION, LOT 1 WAL-MART STORES PLAT NO. 1, ALSO BEING THE SOUTHERLY LINE OF TRACT # 2 OF BOONE COUNTY SURVEY # 7601 OF THE SANFORD F. CONLEY, JR. SUBDIVISION AND THE ¼ SECTION LINE; THENCE N 87°25'30"W, ALONG SAID LINE AND THE SOUTHERLY LINE OF SAID TRACT #1, 1043.04 FEET TO THE BEGINNING AND CONTAINING 18.31 ACRES.

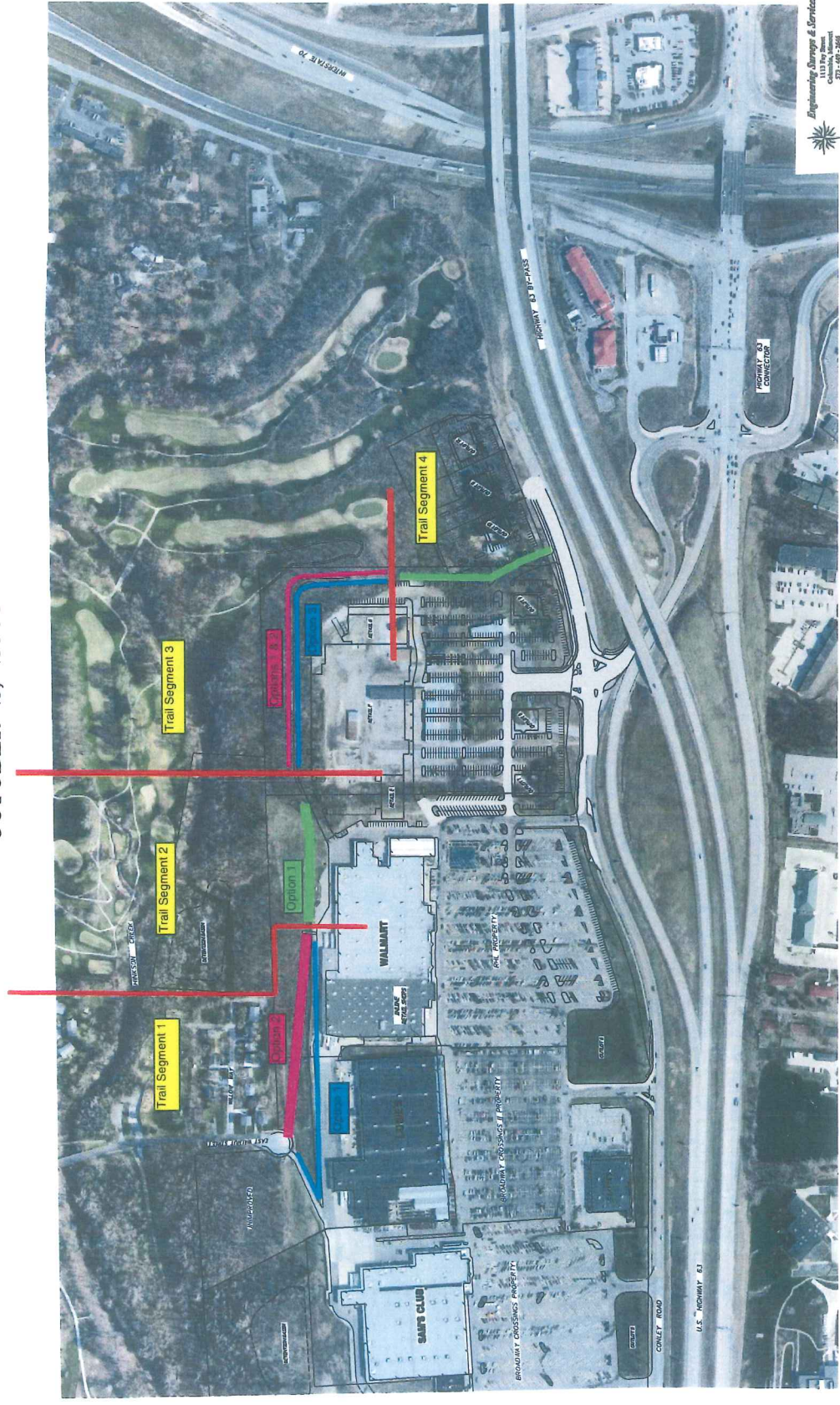
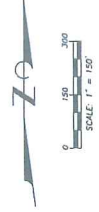
EXHIBIT B

TRAILS

# CONLEY ROAD TDD

## TRANSPORTATION IMPROVEMENTS

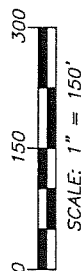
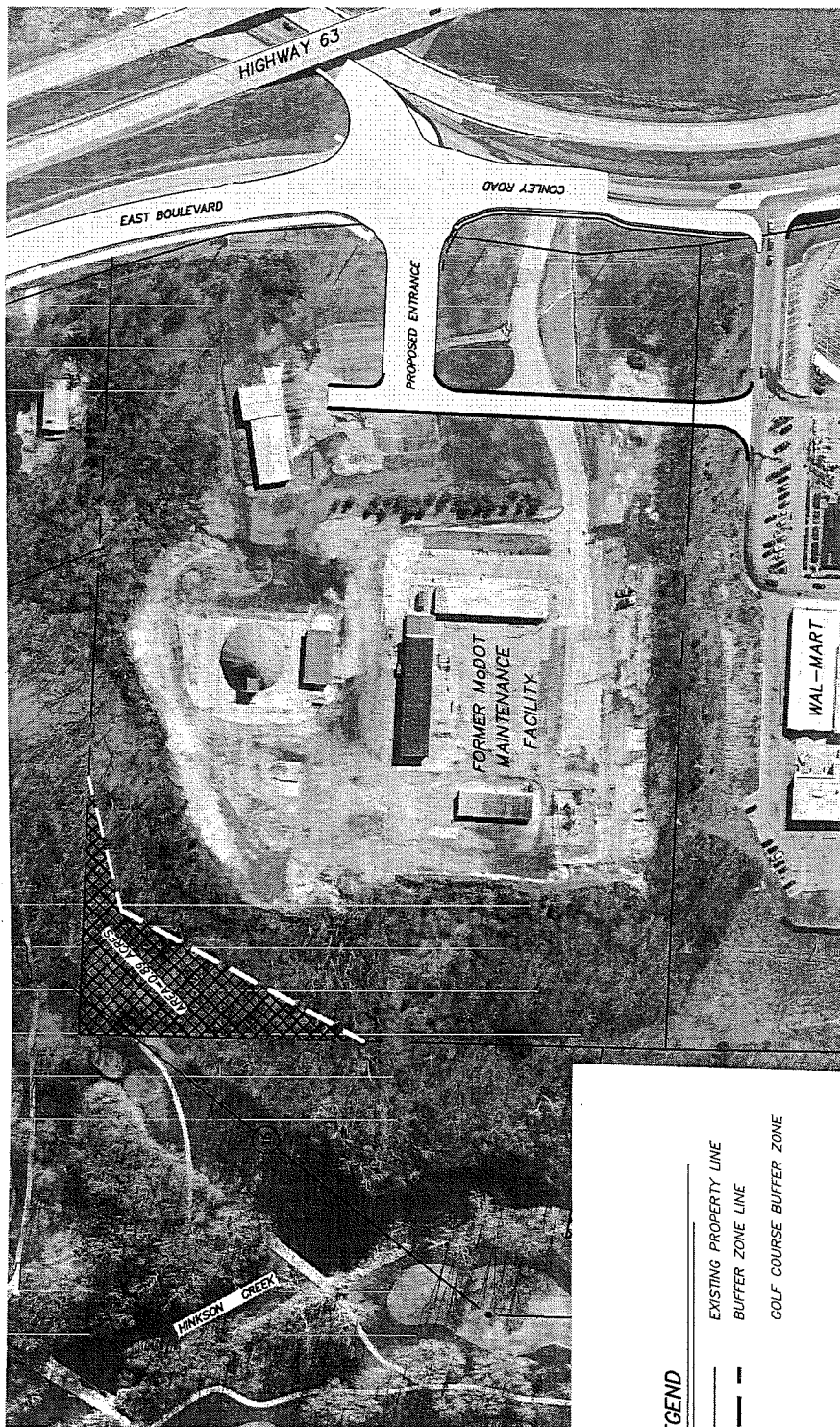
### OCTOBER 2, 2009



**EXHIBIT C**

**EASEMENTS**





# LEGEND

- — — — — EXISTING PROPERTY LINE
- — — — — BUFFER ZONE LINE
- — — — — GOLF COURSE BUFFER ZONE



**Engineering Surveys & Services**

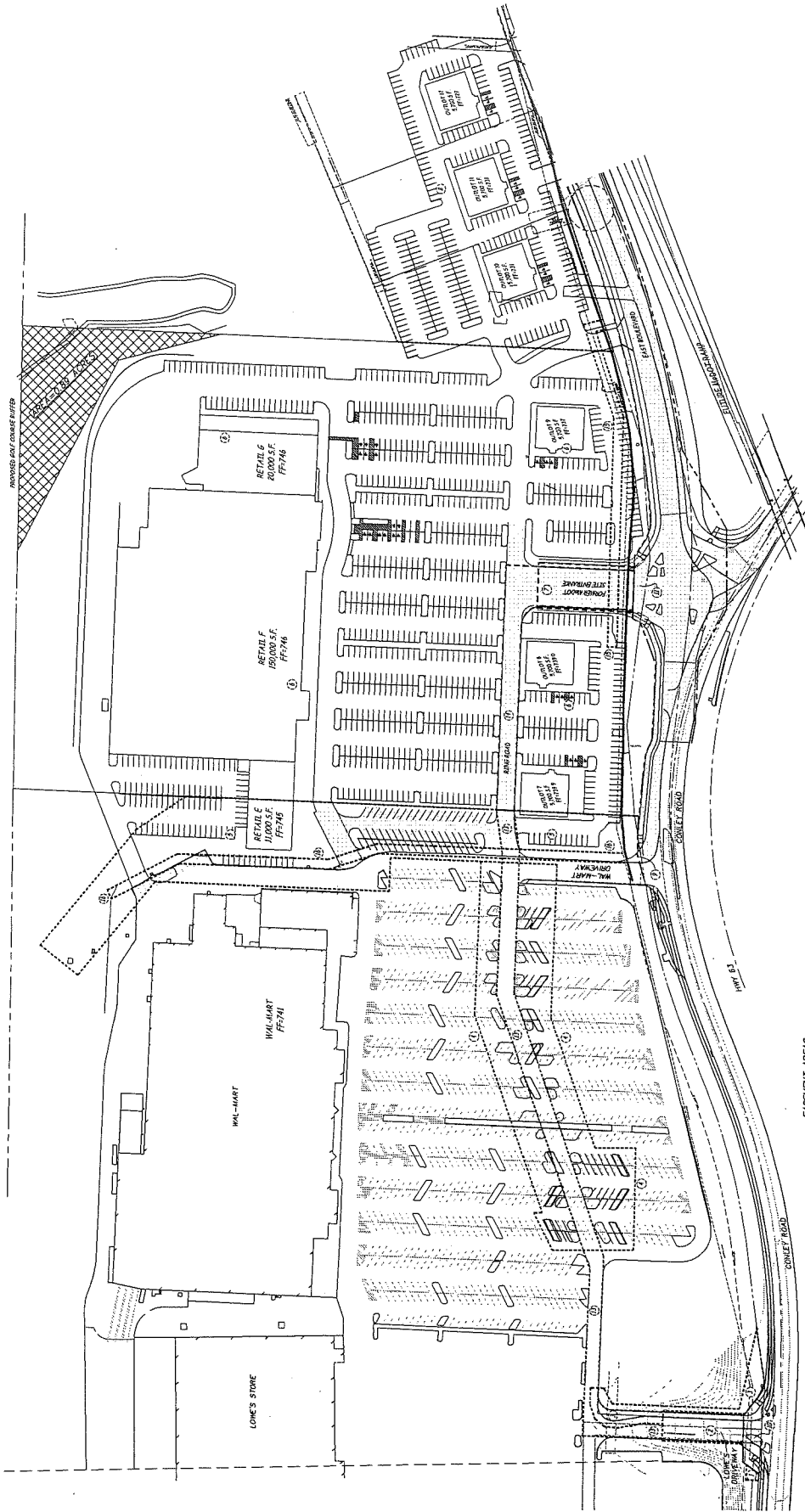


1113 Key Street  
Columbia, Missouri  
573 - 449 - 2646

Missouri Engineering Corporation # 2004005018

## GOLF COURSE BUFFER AREA FORMER MoDOT SITE COLUMBIA, MISSOURI JULY 29, 2009

0988




EASEMENT AREAS	
1. TEMPORARY CONSTRUCTION EASEMENT	360 SQ. FT.
2. INTERLOCK CONSTRUCTION EASEMENT	6,767 SQ. FT.
3. TEMPORARY CONSTRUCTION EASEMENT	8,367 SQ. FT.
4. TEMPORARY CONSTRUCTION EASEMENT	11,575 SQ. FT.
5. TEMPORARY CONSTRUCTION EASEMENT	11,575 SQ. FT.
6. TEMPORARY CONSTRUCTION EASEMENT	275,316 SQ. FT.
7. INTERLOCK CONSTRUCTION EASEMENT	12,136 SQ. FT.
8. TEMPORARY CONSTRUCTION EASEMENT	18,073 SQ. FT.
9. TEMPORARY CONSTRUCTION EASEMENT	11,575 SQ. FT.
10. ADJ. EASEMENT OF WAY	3,196 SQ. FT.
11. ADJ. EASEMENT OF WAY	1,641 SQ. FT.
12. ADJ. EASEMENT OF WAY	227 SQ. FT.
13. ADJ. EASEMENT OF WAY	16,527 SQ. FT.
14. CROSS ACCESS EASEMENT	11,575 SQ. FT.
15. CROSS ACCESS EASEMENT	11,575 SQ. FT.
16. SANITARY SERVICE EASEMENT	2,014 SQ. FT.
17. UTILITY EASEMENT	12,225 SQ. FT.

EASEMENT AREAS

**LEGEND**

	PROPOSED EASMENT	PROPOSED RIGHT-OF-WAY	EXISTING RIGHT-OF-WAY	NEW PAVEMENT
PROPOSED EASMENT	=====			
PROPOSED RIGHT-OF-WAY	=====	=====		
EXISTING RIGHT-OF-WAY		=====	=====	
NEW PAVEMENT				=====

TKG PROPERTIES		COLLEMAN, MISSOURI		Revised	
		<i>Engineering Surveys &amp; Services</i> 1113 Fm. Street Columbia, Missouri 573-449-2446 Missouri Professional Corporation Equal Opportunity Employer		Sheet of	
Surveyed: REC	Drawn: DR	Checked: BAR	Scale 1" = 40'	0014 NOVEMBER 30, 2009	JOB 1332



**EXCERPTS  
PLANNING AND ZONING COMMISSION MEETING  
JANUARY 7, 2010**

**3) PUBLIC HEARINGS**

**09-124 A request by TKG Conley Road Investments, LLC, to rezone property from R-1 (One Family Dwelling District) to C-P (Planned Business District), located at the former MoDOT site north of Wal-Mart on Conley Road, containing approximately 18.31 acres.**

MR. BARROW: May we have a staff report?

MR. LEPKE: We do. Do you want the staff report now, or do you just want to table it? I guess it's kind of up to you.

MR. BARROW: Well, let's wait on the staff report then and have some discussion about tabling. Mr. Hollis, I believe, is representing the organization and he is requesting that we table this to our next meeting, which is January 21st. And I see him shaking his head. And the Planning staff is recommending that we table it until February 18th, and that's what you're recommending.

MR. LEPKE: All right. I can just --

MR. BARROW: And is that -- do you want to have it -- Mr. Hollis, do you want to have it -- can you just come up and say something?

MR. LEPKE: We can sort of explain the timetable and the discrepancy, as well, if you would like.

MR. BARROW: Okay. Very well. Thanks, Mr. Hollis. Yes, please.

MR. LEPKE: All right. Robert had originally indicated January 21st was the meeting to which he wanted it tabled. The new traffic study, which is a key part of our understanding of this project, just came today to our staff, Public Works, MoDOT. And from our conversations -- our, being mine and Pat's -- with folks at MoDOT, our understanding is there will be a minimum three-week review of that new traffic study, probably more four weeks, from what I've gathered. I've heard three different times now it'll take three to four weeks to review that. Once we looked at the calendar and looked at the dates packets had to go out and things of that nature, three weeks review, even if they did it in that time, would be fine and that would be, say, January 28th. The problem it left us was the day we would have gotten their comments -- they, meaning MoDOT and Public Works -- if they took three weeks, it would have been the day we would have had to send out the packet, would have given Planning staff no time to really make any other recommendations, change anything in the report. And the other thing it wouldn't have done was give the petitioner any time then, you know, to react in kind with that sort of thing, as well, reading it on-line and going, oh, okay, now I have, you know, two days after it's been posted on-line to figure out what I'm going to do. So, that was the reason February 18th seemed like the more logical date rather than the 4th, and, also, MoDOT had indicated that the 18th would be the preferable time. So, that was the reasoning for staff's explanation of February 18th.

MR. BARROW: Thank you. Mr. Hollis, do you have something to say? Please state your name

and address for the record.

MR. HOLLIS: Robert Hollis, attorney with Van Matre, Harrison & Hollis, offices at 1103 East Broadway. I agree. The 21st is not reasonable, but he mentioned the 4th and that's because when we had spoken before, we thought the 4th might be workable. It's an estimation that the 4th won't work, and it's my understanding that MoDOT would be the slowest of the groups, or at least it's their opinion that they would be the slowest of the groups to actually review the updated traffic-impact study. After looking at the impact study that came in just today, it doesn't appear that there is that much review that MoDOT would have to undertake, so I would prefer to choose the 4th. In the event that it's not ready on the 4th, just table it again. If it is ready on the 4th, then we haven't wasted two weeks. I see that we lose nothing by choosing the 4th.

MR. BARROW: Thank you. Are there any questions of this speaker? Yes, Mr. Wheeler?

MR. WHEELER: Are you aware of any pending -- I mean, do you have a contract on this? Are you guys going to begin construction at any point this spring? So, really, I mean, the two weeks would be nice, but, once again, we'd be advertising, tabling, if that's the way it went down, and it's kind of inconvenient (a) to the public and, (b) to us. Well, the same to you, but, I mean -- sorry to put you at the end of the list, but, I mean, it's not -- we're not going to be holding you up or your client up by the two-week delay, are we?

MR. HOLLIS: No. That's a fact. There are no users. It's -- ideally, we could take this project with this commission and with the Council that's intact rather than the new Council coming on, so any delay, I think, would push us farther. If there would be a need to delay at Council level, if we're moved to the 18th, it would push us. And like I said, we can always table it on the 4th.

MR. BARROW: Yes?

MS. PETERS: Have you reached an agreement with the country club and the neighborhood association?

MR. HOLLIS: No. We received, I guess, what you would call a counteroffer to -- an informal offer just this afternoon.

MR. BARROW: Are there further questions? Thank you, Mr. Hollis.

MR. HOLLIS: Thank you.

MR. BARROW: We haven't actually opened the public hearing. Go ahead, Ms. Peters?

MS. PETERS: I do have a couple questions of staff. My understanding was there were ten points that were in disagreement, only one of which had to do with MoDOT; am I correct on that?

MR. ZENNER: There are a number that are related to MoDOT, as well as the country club. A little bit of a brief history or a brief synopsis of some of the issues associated with it. There is a traffic study that has been requested based on the nature of the proposed development and its impacts to the MoDOT, as well as the City infrastructure that surrounds this property. This property is also subject to the Conley Road TTD, which is, I believe, what Ms. Peters is referring as to the agreement items. The

context and the evaluation of the traffic study would be able to determine how many, if any, of those ten items that are outstanding that relate to both the roadway extension of Conley across the creek to connect with Business Loop 70 and the impact to the golf course really are in play. And that is one reason why we would suggest from the staff's perspective that the 18th is a more realistic date based on some of the issues associated with this project. The complexity of the traffic study, according to MoDOT and according to our own City traffic engineer, is quite significant. It does not just take into account U.S. 63 and 70 at this property's location, it looks at a much broader area going back all the way to Old 63 and the infrastructure that then comes up Broadway and interacts with the commercial development there. So, the realistic date for MoDOT is probably four weeks. We believe that there may be other issues that need to be addressed within the C-P application that we want to afford the opportunity for staff as collectively and MoDOT to review, and then offer the applicant an opportunity to be involved in that conclusion and any potential recommendations that are brought forth to the Commission. So, we respectfully understand Mr. Hollis' position, but we also would request an approval of the delayed deferral or tabling to allow us an opportunity to give this Commission a full report.

MR. BARROW: Further questions? Yes, Mr. Rice?

MR. RICE: Oh. Are you going to open a public --

MR. BARROW: Well, I think so, but I want to get all the questions done.

MR. RICE: Okay. Then I have no further questions.

MR. BARROW: Okay. Well, I'm going to open the public hearing. We have not had a staff report on this, and my -- this is my personal issue, and I don't like getting these last-minute tablings because it's not fair to the public and the other people who are not on the inner loop, and they're spending their valuable time to come out to these meetings, and I don't like to see them getting what I consider to be jerked around. Now, I understand that a lot of this stuff is happening at the last minute. I'm not blaming anybody -- Mr. Hollis or anyone else for that. Maybe it's just the circumstances. I'm just saying for me personally, I think it's really disempowering and disrespectful to the citizens who are spending their time to come out here, and I don't like to see them getting jerked around. So, I personally am not for the idea of, well, we'll just table it and it's to the next possible date and then we'll retable it and retable it, because it's a way to lose that citizen involvement which, I think, makes for a better decision, in my experience. So, I just wanted to say that on a personal level. Having said that, though, I think that we probably are going to table this because I think that everyone needs more time to study what -- and look at the studies that we've just received. And I definitely know that our Commission wants to get a full advice from MoDOT's opinion and the City staff's opinion, and give us a chance to get it in a packet that we can then read and study and have some time to think about. So, I'm thinking that we're -- my sense is that our Commission will table this to a date certain, but I think there are some people who might have come to this public hearing who might have some comments

they want to make. I would suggest that when we do -- if we do table it, that you come and listen and we'll have a full staff report, and then you can have a more informed public-comment period. But I am going to open it up right now and anyone who has come here tonight who wants to talk on this subject, I'm going to invite you to come forward and speak. Please come to the lectern and state your name and address for the record. So, I'm going to open the public hearing on this.

**PUBLIC HEARING OPENED**

MR. BARROW: Anyone who wishes to come forward, please step forward and speak.

MR. FARNEN: Good evening. My name is Mark Farnen, 103 East Brandon, and I represent the Columbia Country Club. We are a group that has filed a letter that is in your packet tonight, and in that, we came to the conclusion as a group that this particular presentation tonight would be premature, and we gave various instances. I think it's probably the very last document that's in your packet. Those items are outlined there. I know it's a cold night and everybody would like to move this forward. But in that regard, we would support -- we do have several people here tonight, but they are of the consensus or of the same mind that tabling is fair, and so, we would support that request. We would also support the City staff's position that time may be needed to review these materials and we would defer to the staff's opinion in this regard as to the date to which it is tabled. We would prefer not to get the same group of people out yet again, then yet again. And I think that goes to Commissioner Barrow's statement that it is difficult to engage citizens on a regular basis to do this, particularly when it is known in advance that it may yet be tabled again. So, we would defer to City staff. We do support the action to table in fairness to the applicant, and we would entertain any other questions that may be -- our reasoning for that is in the packet.

MR. BARROW: Thank you. Are there any questions? Thank you.

MR. FARNEN: Thank you.

MR. DOWNEY: Good evening. My name is James Downey; I'm the president of the Country Club Estates Neighborhood Association. I've had an opportunity to discuss this matter with members of our neighborhood association, but I would have to concur that until we have a chance to really look at the additional information that is forthcoming, we cannot really present a formal opinion, so I would also support tabling until a later date certain that we can schedule so that I can have a chance to get feedback from our membership. Thank you very much.

MR. BARROW: Thank you. Are there any questions of this speaker? Thank you. Anyone else wishing to speak, please come forward. I know it was probably a lot of fun driving in the snow and the wind and the cold to get here, so I'd be happy to hear to whatever you have to say. Seeing no one.

**PUBLIC HEARING CLOSED**

MR. BARROW: Discussion, Commissioners? Yes, Mr. Rice?

MR. RICE: Well, in the interest of keeping things moving here, I'm going to go ahead and make a motion we table this until February 28th meeting. Wait. What was it?

MS. PETERS: Eighteenth.

MR. RICE: Eighteenth. I'm sorry. Did I say -- yeah.

MR. BARROW: We'd have to come on a Sunday. I think the 28th is -- the 18th, yes, sir. Yes, Ms. Peters?

MS. PETERS: Second.

MR. BARROW: It's been moved and seconded. Is there discussion on the motion? Are you ready, Mr. Secretary?

MR. WHEELER: Yes, I am. The motion has been made and seconded to recommend tabling of a request by TKG Conley Road Investments, LLC, to rezone property from R-1 to C-P, located at the former MoDOT site north of Wal-Mart on Conley Road, containing approximately 18.31 acres, to the February 18th meeting.

**Roll Call Vote (Voting "yes" is to recommend approval.) Voting Yes: Mr. Reichlin, Mr. Rice, Mr. Vander Tuig, Mr. Wheeler, Ms. Anthony, Mr. Barrow, Ms. Peters. Motion carries 7-0.**

MR. BARROW: Very well. See you next month.

**Excerpts**  
**Planning and Zoning Commission**  
**February 18, 2010**

**3) PUBLIC HEARINGS**

**09-124 A request by TKG Conley Road Investments, LLC, to rezone property from R-1 (One Family Dwelling District), to C-P (Planned Business District), located at the former MoDOT site north of Wal-Mart on Conley Road, containing approximately 18.31 acres. This item was tabled at the January 7, 2010, meeting.**

MR. BARROW: And I believe there has been a request to withdraw this. Staff report, please?

MR. ZENNER: That is correct, Mr. Chairman. There has been a request to withdraw the application. You should have received that and you should have it in your packet. The applicant has indicated that they are desiring to just pull it without having any additional recommendation or staff review at this point. They have stated within their correspondence for the withdrawal that they are leaving themselves the option for resubmitting, but have not given a definitive date when and if that will occur. So, at this point, this application will be considered dead if so passed by this commission, and we would, basically, start from scratch if it does come back in.

MR. BARROW: So, it's our decision what to do with it? I mean, do they --

MR. ZENNER: That is correct.

MR. BARROW: Very good. And this isn't a subdivision, this really was a public hearing; correct?

MR. ZENNER: Public hearing. We apologize for the error on the agenda. Both the items you will be discussing this evening are public-hearing items.

MR. BARROW: Very good. Is there anyone who wants to speak on this? I'll invite them to come forward. I guess everyone got the word that it's been requested to withdraw. So, discussion, Commissioners? Yes, Mr. Brodsky?

MR. BRODSKY: Well, I'll just say I'm glad this was withdrawn and I think the applicant and the country club have some things to hash out, and we didn't need to muddy the waters. I would make a motion to allow the withdrawal of this application.

MR. RICE: Do we even have to do that?

MR. BARROW: Yes, Ms. Peters?

MS. PETERS: I think I have a few questions before a motion. A question I would have is what's the current zoning as it is now on that? Can they do what happened at Crosscreek? Can they strip it?

MR. ZENNER: The current zoning of the property is R-1. And provided they were able to obtain an appropriate permit, there is that possibility. This site is improved with the former MoDOT facility, so in order to do that, you would have to demo everything off the site before you could actually, for the lack of better terms, tabletop the land, but there is always that opportunity. If they get a regulatory permit for land

disturbance, they can do what they want with it.

MS. PETERS: Okay. Thank you.

MR. BARROW: Yes?

MR. WHEELER: Can you answer the question if, procedurally, do we need to make this motion to allow the withdrawal, or exactly how does that work, because that doesn't happen often here, so --

MR. BARROW: Yeah. I've never seen that before.

MR. ZENNER: It doesn't happen often and for the purposes of making a motion, you do not have to. For the public record, my recommendation would be take formal action on it so the public knows what your position was.

MR. BRODSKY: In terms of --

MR. ZENNER: Of accepting the withdrawal.

MR. BRODSKY: Oh, okay.

MR. ZENNER: With the acknowledgment that an application may be forthcoming later.

MR. BRODSKY: That was the intent of my motion.

MR. BARROW: Yes, Mr. Rice?

MR. RICE: I don't believe it was seconded, and I'll just --

MR. BARROW: It hasn't been seconded. Yes, I was calling on you.

MR. RICE: Yeah. Second.

MR. BARROW: Second the motion. So, if it's withdrawn, it's -- then if it came back, it would be another advertisements and just go through that whole process again?

MR. ZENNER: That would be correct. This doesn't follow the same 12-month restriction if it were to be recommended for denial after the commission took action and withdrew before Council. So, they do -- they could come back in next week and make a new submission if they so desire.

MR. BARROW: But they could come back then and ask for O -- an office designation?

MR. ZENNER: Correct. Or they could ask for the same C-P.

MR. BARROW: Right. Very good. It's been moved and seconded. Is there any discussion on the motion? Very well. Are you ready, Mr. Secretary?

MR. WHEELER: I am.

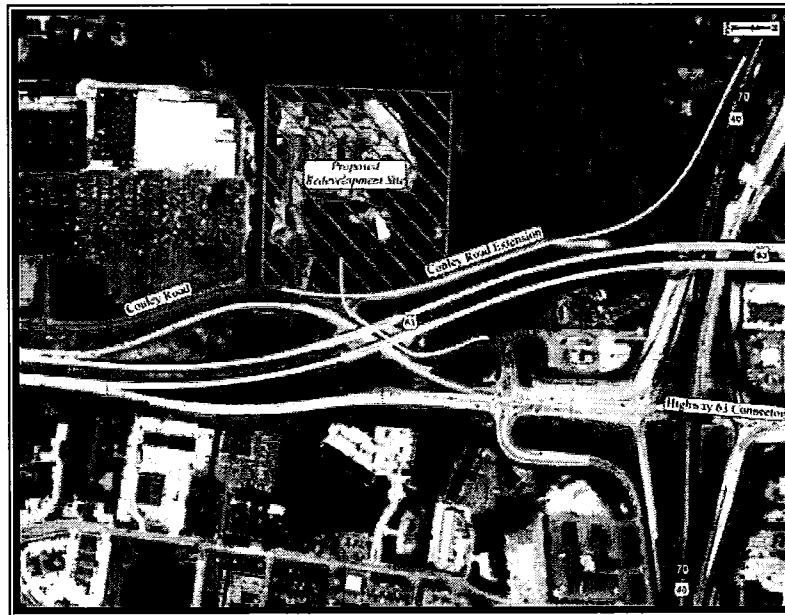
MR. BARROW: May we have a roll call, please?

MR. WHEELER: A motion has been made and seconded to allow withdraw noting that it may come back forth at a later date, the application meaning.

**Roll Call Vote (Voting "yes" is to recommend approval.) Voting Yes: Mr. Rice, Mr. Vander Tuig, Mr. Wheeler, Mr. Barrow, Mr. Brodsky, Dr. Puri, Mr. Reichlin. Voting No: Ms. Peters. Motion carries 7-1.**

**TRAFFIC IMPACT STUDY**  
**For The**  
**REDEVELOPMENT OF THE**  
**M<sub>o</sub>DOT MAINTENANCE FACILITY**  
**&**  
**CONLEY ROAD EXTENSION**

**Columbia, Missouri**



Prepared for:  
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January 2010

**CBB** Crawford, Bunte, Brammeier  
Traffic and Transportation Engineers



**TRAFFIC IMPACT STUDY**  
**FOR THE**  
**REDEVELOPMENT OF THE MODOT MAINTENANCE FACILITY**  
**&**  
**CONLEY ROAD EXTENSION**  
  
**COLUMBIA, MISSOURI**

**JANUARY 7, 2010**

**Prepared For:**

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**CBB Job Number 187-09**

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## **Executive Summary**

Crawford, Bunte, Brammeier previously completed a traffic impact study for the redevelopment of the Missouri Department of Transportation (MoDOT) maintenance facility – located on Conley Road north of the Broadway Marketplace shopping center – and Conley Road extension in 2007.

Since that time, Hy-Vee is now constructing a new store at the vacant MegaMarket site within the Broadway Marketplace. The occupancy of that site was not accounted for in the previous traffic impact study, and thus the impact of the future Hy-Vee trips was not considered. Furthermore, the feasibility of the two-lane extension of Conley Road northwest to Business Loop 70 has become clouded by circumstances concerning right-of-way acquisition from Columbia Country Club. However, the long-term ramifications of not extending Conley Road were not considered by previous efforts.

In lieu of issuing more addendums, it was determined that revising and repackaging the previous traffic impact study would most effectively address these outstanding items at one time. This study update incorporated the additional trips generated by the Hy-Vee grocery store totaling 77,722 ft<sup>2</sup> and evaluated opening year and design year time horizons both *with and without the Conley Road extension*. The overarching goals were to verify the adequacy of the previously recommended road improvements and determine if the Conley Road extension is needed to mitigate the trip generation impact of the proposed redevelopment.

Capacity analyses of existing conditions indicate that nearly all of the signalized intersections in the study area currently have acceptable overall conditions (LOS D or better) during the p.m. peak hour. Conditions at the intersection of Highway 63 connector and Conley Road/I-70 Drive Southeast are constrained; and as a result, the intersection operates at LOS E overall. Additionally, a few individual approaches/movements at other intersections have existing deficiencies.

Traffic forecasts were prepared for the proposed redevelopment which indicated the site could generate a total of 560 “new” trips during the p.m. peak hour. In addition, forecasts were developed to reflect the anticipated diversion of traffic to the Conley Road Extension. Estimates of the diversions were based upon output from the City’s travel demand model, a limited origin-destination study and prevailing travel patterns in the area. Traffic forecasts for Hy-Vee, the Broadway Bluffs, and Centerstate Crossing Phase I were reflected in the analyses.

2010 forecasted conditions were evaluated to determine opening year operating conditions and also to identify roadway and traffic control improvements that would be needed to mitigate the impact of the redevelopment. The following improvements were prescribed:

- Construct a four-leg signalized intersection adjacent to the redevelopment site, thereby rerouting the current Conley Road alignment through the intersection’s south and east legs. The main entrance to the site would occupy the west leg, and the Conley Road extension would depart from the north leg.

- ❑ Widen to provide triple left-turn lanes on eastbound Conley Road at Highway 63 connector, and widen to provide a dedicated right-turn lane on westbound I-70 Drive Southeast at Highway 63 connector.
- ❑ Convert the existing Wal-Mart drive onto Conley Road to three-quarters access (prohibiting eastbound left-turns) and construct a dedicated southbound right-turn lane on Conley Road at the entrance.
- ❑ Signalize the existing Lowe's drive onto Conley Road, and construct a southbound right-turn lane on Conley Road at the entrance. To support signalizing the intersection, the west leg should be widened from 35 feet to 40 feet.
- ❑ Construct a roundabout at the intersection of Trimble Road and Brickton Road to alleviate congestion that is expected once Hy-Vee is operational. *It must be emphasized that this improvement is not necessary to mitigate the impact of the proposed redevelopment. Rather the need for a roundabout is driven by the additional traffic that would be generated by Hy-Vee.* A single-lane roundabout with a northbound right-turn by-pass is recommended, though the design should accommodate future expansion to two circulating lanes.

Should Conley Road not be extended, the aforementioned improvements would still be needed. The absence of the extension would trigger one minor change in traffic signal phasing at the site's main entrance intersection with Conley Road. Without north-south through traffic at the intersection, protected northbound and southbound left-turn phasing would not be needed as all northbound and southbound movements could operate under a common green phase.

The 2010 improvements would effectively mitigate the impacts of the proposed redevelopment and would adequately serve projected traffic demands both with and without the Conley Road extension. While the proposed extension constitutes a regional connectivity enhancement, *its implementation is not necessary to accommodate traffic generated by the proposed redevelopment.* In fact, operating conditions at most study area intersections would not be significantly affected by the Conley Road extension or its absence.

The additional traffic generated by Hy-Vee would be adequately accommodated by the recommended improvements. Improvements (a roundabout) would be needed at the intersection of Trimble and Brickton in 2010 to mitigate the impact of Hy-Vee. In the previous study, improvements were not identified at that location until 2030. On a separate note, improvements identified by the previous study for Broadway with Old Highway 63 have been implemented by the City of Columbia. No addition improvements are recommended at that intersection for 2010.

An analysis of "design year" 2030 conditions was completed to determine the ability of the area road system to accommodate long-term traffic demands. Additional improvements beyond those recommended in 2010 were identified as follows:

- ❑ Construct an eastbound right-turn lane at the intersection of Business Loop 70 and Old Highway 63, and provide a northbound left-turn lane to separate the left-turn and through (to Paris Road) movements.
- ❑ Provide additional northbound and southbound through lanes on Old Highway 63 at Broadway as well as eastbound and westbound right-turn lanes on Broadway. These improvements would be needed in order for each movement to operate below its capacity.

The preceding 2030 improvements should not be construed as the responsibility of the proposed redevelopment, but rather they are recommendations to help the review agencies plan for the future. They should, however, be considered irrespective of whether Conley Road is extended.

It should be emphasized that the Conley Road extension, while beneficial from a regional connectivity standpoint, would not have a significant impact upon 2030 operating conditions in the study area. Ultimately, the base developments, the proposed redevelopment, and anticipated background growth could be accommodated by the 2030 road network both with and without the Conley Road extension. Therefore, *it can be concluded that the extension is not necessary to accommodate 2030 forecasted traffic volumes.*

While “Improve I-70” was not included in this study, it was demonstrated that the proposed area road system could accommodate future improvements being contemplated, namely the proposed ramp from Highway 63 connector/Conley Road to southbound Highway 63. Efforts to connect the ramp as proposed were unsuccessful, but an alternative was developed that would utilize the existing ramp and allow it to intersect Highway 63 connector at the northbound exit ramp intersection. Analyses indicate that this alternative would operate favorably based on 2030 traffic volume projections.

## **Introduction**

Crawford, Bunte, Brammeier previously completed a traffic impact study for the redevelopment of the Missouri Department of Transportation (MoDOT) maintenance facility – located on Conley Road north of the Broadway Marketplace shopping center – and Conley Road extension in 2007. Since the completion of that study, two addendums were issued to address cross access with the neighboring Broadway Marketplace and the short-term ramifications of not extending Conley Road.

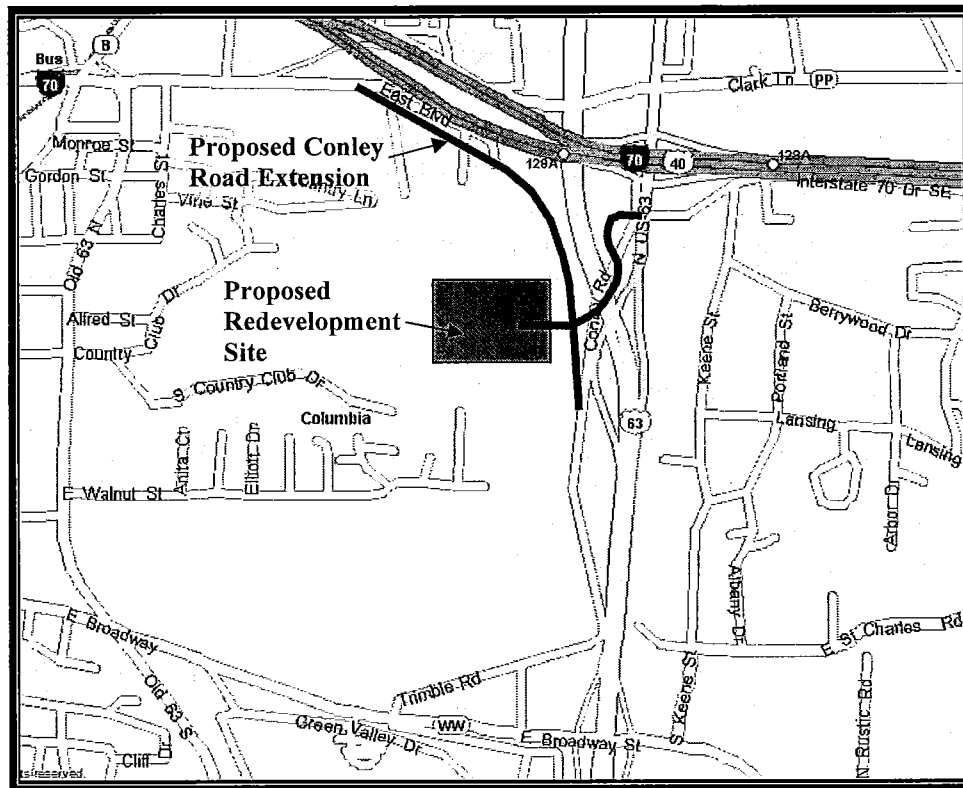
At this time, Hy-Vee is constructing a new store at the vacant MegaMarket site within the Broadway Marketplace. The occupancy of that site was not accounted for in the previous traffic impact study, and thus the impact of the future Hy-Vee trips was not considered. Furthermore, since the completion of the previous study, the feasibility of the two-lane extension of Conley Road northwest to Business Loop 70 has become clouded by circumstances concerning right-of-way acquisition. However, the long-term ramifications of not extending Conley Road were not evaluated by previous efforts.

In lieu of issuing more addendums, it was determined that revising and repackaging the previous traffic impact study was the most effective means of addressing these outstanding items. Consequently, this study update incorporated the additional trips generated by the Hy-Vee grocery store totaling 77,722 ft<sup>2</sup> and evaluated opening year and design year time horizons both with and without the Conley Road extension. The overarching goals were as follows:

- ❑ Verify the adequacy of the previously recommended road improvements to accommodate the Hy-Vee traffic; and
- ❑ Determine if the Conley Road extension is necessary to mitigate the trip generation impact of the proposed redevelopment either in the short- or long-term.

This revised study was structured and organized in the same fashion as the previous study. Specifically, existing operating conditions along the adjacent roadways were evaluated (based upon data collected as part of the original study); future traffic demands associated with the redevelopment of the site and Conley Road extension were projected; the ability of the proposed road system to accommodate the forecasted traffic demands was analyzed; and improvements were recommended as needed. **Figure 1** depicts the study area including the locations of the proposed redevelopment site and Conley Road extension.





**Figure 1: Site Location Map**

Redevelopment plans remain undefined at this time. The previous assumption that the site would yield approximately 200,000 square feet of commercial uses remains valid and was assumed for this study as well. Primary access is still proposed via the west leg of a new intersection between existing Conley Road and the Conley Road extension. Effectively, the Conley Road extension would occupy the new intersection's north leg, existing Conley Road to/from Highway 63 connector would utilize the east leg (shown in green in Figure 1) and the south leg would carry existing Conley Road towards Broadway Marketplace.

This study evaluated conditions along Conley Road and Broadway adjoining the Broadway Marketplace shopping center; along Business Loop 70 from Old Highway 63 to the Interstate 70 ramps; and on Highway 63 connector at Conley Road and at the Interstate 70 south ramp terminal. At the request of the City of Columbia, the intersection of Broadway and Old Highway 63 was also evaluated to identify possible future City improvements. The focus was the afternoon peak period of a typical weekday since that period would be most critical with respect to the site's trip generation as well as conditions along the adjacent roadways.

The following report presents the study's methodology and findings relative to Existing, Base, Forecasted 2010, and Forecasted 2030 conditions.

## **Existing Conditions**

In order to identify the traffic impacts associated with the proposed redevelopment and associated roadway improvements, it was necessary to quantify traffic conditions as they exist prior to development. To that end, operational analyses of existing traffic volumes on the surrounding road system were performed. Note that traffic counts and field observations were not repeated for this updated study, and therefore this evaluation represents a “snapshot” of 2006 conditions when the original traffic study was completed.

### ***Existing Roadway Conditions***

The general area of interest is bounded by Interstate 70 to the north, Highway 63 to the east, Old Highway 63 to the west and Broadway to the south. Each of the major roadways within this area is described below:

- **Interstate 70 (I-70)** is a four-lane freeway that serves as the primary east-west travel route in central Missouri. Access between I-70 and the study area is provided at interchanges with Highway 63 and Business Loop 70.

The Highway 63 interchange is a typical “diamond” with signalized ramp terminals on each side of I-70. Some years ago, Highway 63 through traffic was rerouted to by-pass the interchange, thereby eliminating direct access between I-70 and the mainline of Highway 63. To access I-70 from Highway 63 and vice versa, motorists now use what’s known as the Highway 63 connector, which is the former Highway 63 mainline through the “diamond” interchange.

More recently, Highway 63 connector and the I-70 ramps were improved to alleviate traffic congestion at the interchange. Specifically, the I-70 ramps were widened to increase capacity at the ramp terminal intersections, and nearby intersections along Highway 63 connector at Conley Road and Clark Lane were improved.

At the Business Loop 70 interchange west of Highway 63, ramps provide access to and from the east on I-70 only (no access is provided to/from the west). Note that recent improvements now physically prevent traffic entering westbound I-70 at Highway 63 from exiting at Business Loop 70.

- **Highway 63** is a four-lane expressway that is a primary north-south route in the region, linking Columbia with Jefferson City to the south and Moberly to the north. Access from Highway 63 to the redevelopment site and Broadway Marketplace is provided at the Broadway interchange and via the signalized intersection at Highway 63 connector and Conley Road.

In conjunction with the recent upgrades to Highway 63 connector, the intersection with Conley Road was relocated south to increase its separation from the I-70 interchange. Lanes were also added to several approaches to increase capacity. Currently the eastbound approach has dual left-turn lanes and one shared through/right-turn lane; the westbound approach has one left-turn lane and one shared through/right-turn lane; the

northbound approach has one left-turn lane, two through lanes and one shared through/right-turn lane; and the southbound approach has one left-turn lane, two through lanes and one right-turn lane.

- ❑ **Conley Road** serves as an outer road along the west side of Highway 63 linking Broadway to the south (via Brickton and Trimble Roads) with Highway 63 connector to the north. The primary function of Conley Road is to provide access to the Broadway Marketplace shopping center, and in total there are five drives serving the center along the roadway. Conley Road has three lanes of travel, one through lane in each direction and one center left-turn lane, and is classified as a major collector. The posted speed limit is 30 miles per hour (mph).
- ❑ **Broadway** is a major arterial roadway (the posted speed limit is 40 mph) that provides access to Broadway Marketplace from the south via Trimble and Brickton Roads. Broadway was recently upgraded to five lanes between Highway 63 and Old Highway 63 (that segment was previously just two lanes). To the west of the study area, Broadway bisects central Columbia and is maintained by the City. To the east, Broadway interchanges with Highway 63 and is maintained by MoDOT.
- ❑ **Brickton and Trimble Roads** are local streets connecting Broadway with the Broadway Marketplace shopping center and Conley Road. Note that recent upgrades to the Broadway corridor removed the traffic signal from the intersection of Broadway and Brickton Road in lieu of signaling Broadway and Trimble Road. As a result, the Broadway and Brickton intersection currently allows three-quarters access, whereby the southbound left-turn movement is prohibited. Instead, those vehicles must use the new traffic signal at Trimble to turn left onto eastbound Broadway.

The Broadway and Trimble intersection was upgraded such that the eastbound approach has two left-turn lanes, one through lane and one shared through/right-turn lane; the westbound approach has one left-turn lane, two through lanes, one right-turn lane; the southbound approach has two left-turn lanes and one shared through/right-turn lane; and the northbound approach has separate left- and right-turn lanes. Our field observations noted that the northbound through movement is prohibited.

Traffic on Broadway can also use Trimble or Brickton to access Conley Road. In fact, Trimble, Brickton and Conley Roads intersect at an all-way Stop at the south end of Broadway Marketplace. Trimble arrives from the west, Conley Road arrives from the east, Brickton enters from the south, and the main parking field is directly to the north.

- ❑ **Business Loop 70** to the east of Old Highway 63 is classified as a major collector that provides access to and from I-70 east and the adjacent uses. It carries one lane eastbound and two lanes westbound (the second lanes enters from I-70 and departs as the left-turn lane at Old Highway 63).

The intersection of Business Loop 70 with Old Highway 63 is signalized. The westbound approach has one left-turn lane and one shared thru/right-turn lane; the

eastbound approach has one shared thru/right-turn lane; and the northbound approach has one shared left-turn/thru lane and one right-turn lane. Note that the north leg carries northbound traffic only to Paris Road, but does not accept eastbound left-turns which are restricted. The eastbound right-turn is channelized, and a generous radius pushes the movement well outside the intersection.

### ***Existing Traffic Conditions***

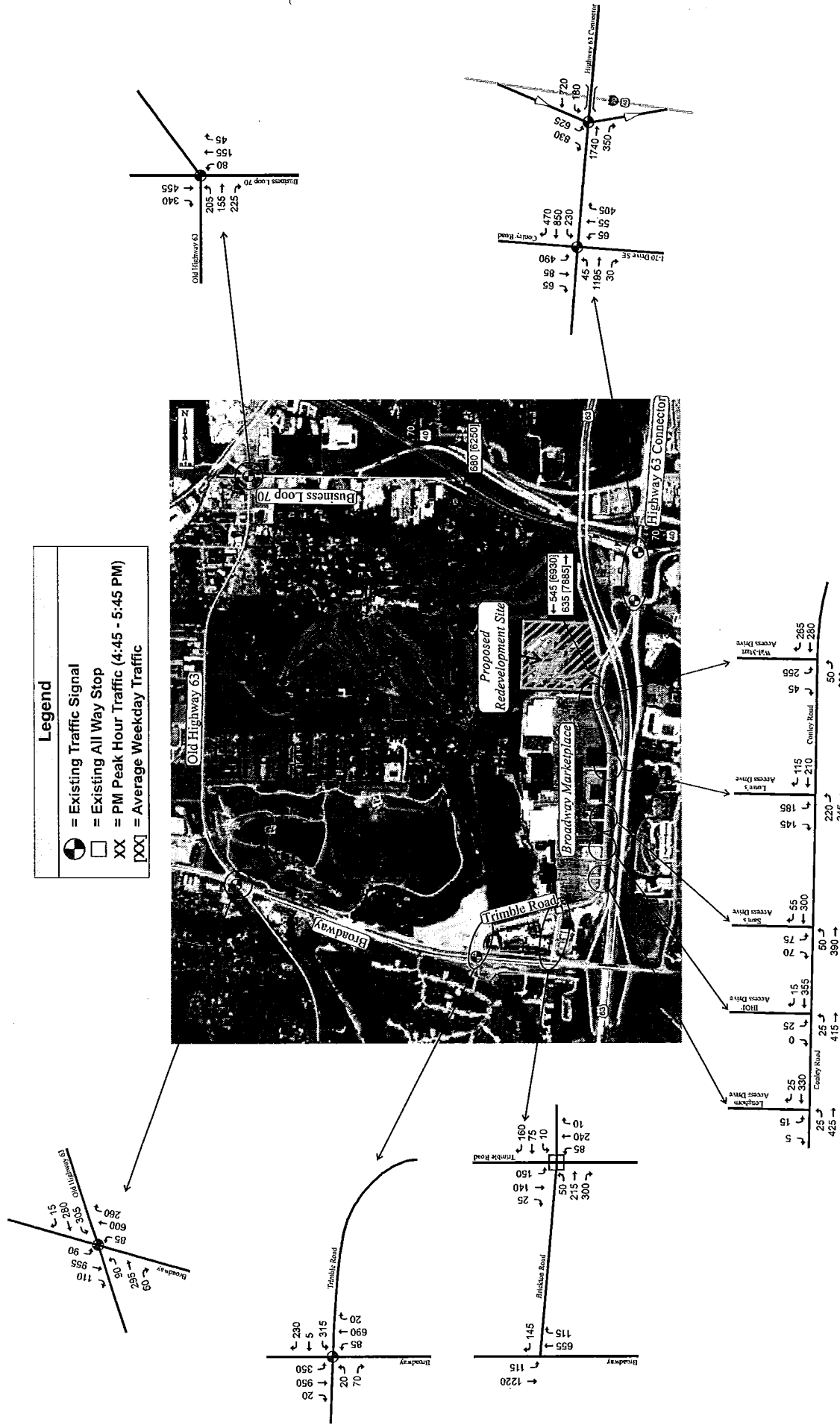
In order to establish existing traffic volumes, manual counts were conducted at the critical intersections on a weekday from 4:00 p.m. to 6:00 p.m. during May of 2006. Specifically, the intersections of Business Loop 70 and Old Highway 63; Broadway and Trimble Road; Broadway and Brickton Road; Trimble Road and Brickton Road; and the Broadway Marketplace driveways along Conley Road were counted.

MoDOT provided counts for the intersections of Highway 63 connector with the I-70 eastbound ramps and Conley Road/I-70 Drive Southeast, and the City of Columbia provided counts for the intersection of Broadway with Old Highway 63. Collectively based on all the counts, it was determined that the afternoon peak hour of traffic flow on a typical weekday occurs between 4:45 p.m. and 5:45 p.m. **Exhibit 1** summarizes the existing peak hour volumes based on the 2006 count data.

As can be seen, approximately 1,200 vph pass the site on Conley Road during the p.m. peak hour. These flows in turn produce heavy turning movements to/from the north at the intersection with Highway 63 connector. Volumes on Business Loop 70 between Old Highway 63 and I-70 total approximately 1,000 vph during the p.m. peak hour and are predominantly oriented in the eastbound direction toward I-70. Broadway near Brickton Road carries about 2,460 vph during the p.m. peak hour.

The manual counts were supplemented with automatic machine counts on Conley Road north of Wal-Mart, Business Loop 70 east of Old Highway 63, and the ramp from Business Loop 70 to eastbound I-70. As discussed in a subsequent section, MoDOT requested the Business Loop 70 ramp to eastbound I-70 be closed in conjunction with extending Conley Road. Machine count data for that ramp was plotted in **Figure 2** to illustrate how much traffic would be displaced by closing the ramp. As can be seen, volumes peak at approximately 680 vph during the afternoon.

Legend	
	= Existing Traffic Signal
	= Existing All Way Stop
XX	= PM Peak Hour Traffic (4:45 - 5:45 PM)
[XX]	= Average Weekday Traffic



**Exhibit 1: Existing Traffic Volumes**

Redevelopment of the MoDOT Maintenance Facility and  
Conley Road Extension  
Columbia, Missouri  
Job# 187-99  
1.05/10

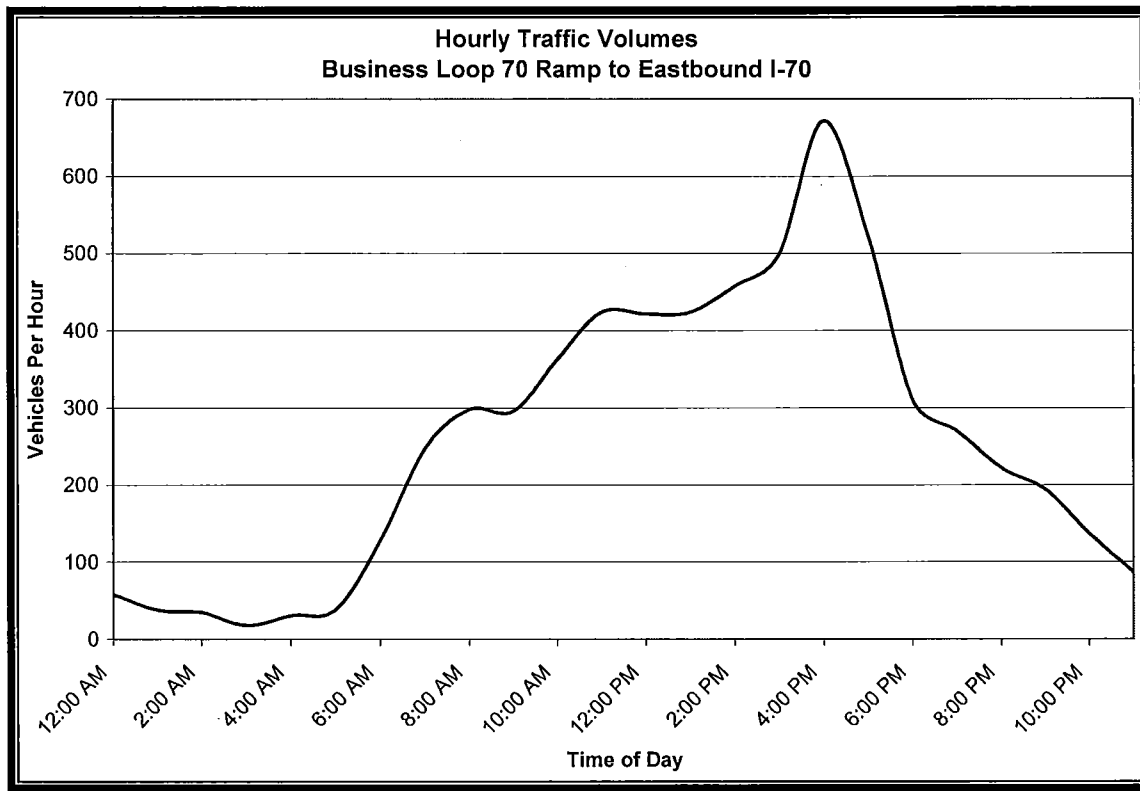


Figure 2: Machine Count Data Business Loop 70 Ramp to I-70 Eastbound

### Existing Operating Conditions

Existing operating conditions at the study intersections were evaluated using SYNCHRO 6 which is based on study procedures outlined in the *Highway Capacity Manual*, last updated in 2000 by the Transportation Research Board. This manual which is used universally by traffic engineers to measure roadway capacity, establishes six levels of traffic service: Level A ("Free Flow"), to Level F ("Fully Saturated").

Levels of service (LOS) are measures of traffic flow which consider such factors as speed, delay, traffic interruptions, safety, driver comfort, and convenience. Level C, which is normally used for highway design, represents a roadway with volumes ranging from 70% to 80% of its capacity. Level D is considered acceptable for peak period conditions in urban areas.

Levels of service thresholds and criteria vary depending upon the type of traffic control used at an intersection (i.e. whether it is signalized or unsignalized). At signalized intersections, average control delay per vehicle is estimated for each movement and aggregated for each approach and the intersection as a whole.

At intersections with partial (side-street) stop control, delay is only calculated for the minor movements – but not for the intersection as a whole – since motorists on the main road are not required to stop. In addition, signalized intersections are designed to carry higher traffic volumes, so longer delays are typically tolerated at those locations.



**Table 1** summarizes the thresholds for each LOS.

**Table 1: Level of Service Thresholds**

Level of Service (LOS)	Control Delay per Vehicle (sec/veh)	
	Signalized Intersections	Unsignalized Intersections
A	$\leq 10$	0-10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

Each of the study intersections was evaluated using the methodologies described above. **Table 2** summarizes the results of these analyses, which reflect existing operating conditions and average delays during the p.m. peak hour.

Highway 63 and I-70 South Ramp Terminal

The Highway 63/I-70 interchange was recently upgraded, and operating conditions have improved as compared to the level of congestion that previously existed. The south ramp terminal intersection now operates acceptably at LOS C overall during the p.m. peak hour.

Highway 63 and Conley Road/I-70 Drive SE

In conjunction with the Highway 63/I-70 interchange improvements, the intersection of Highway 63 with Conley Road/I-70 Drive SE was relocated to the south to further increase its separation from the interchange. While conditions at the relocated intersection are acceptable on most approaches, lengthy delays commensurate with LOS F persist on the westbound (I-70 Drive SE) approach during the p.m. peak hour. These delays were confirmed during our field observations and are the result of insufficient right-turn capacity, namely the absence of a dedicated lane for that movement. As a result, the intersection operates at LOS E overall.

Business Loop 70 and Old Highway 63

The intersection of Business Loop 70 and Old Highway 63 operates acceptably at LOS D overall during the p.m. peak hour, despite average delays of 80 seconds (LOS F) on the eastbound approach. While heavy traffic was observed on the eastbound approach, no apparent instances of cycle failure (vehicle queues failing to clear on green) were noted and delays did not appear to be consistent with LOS F. Therefore, it stands to reason that the delay reported in Table 2 is likely overstated.

Broadway and Brickton Road

The intersection of Broadway with Brickton Road was recently modified to restrict southbound left-turns, allowing three-quarters access. This modification was implemented

in conjunction with removing the intersection's traffic signal and signalizing the intersection of Broadway and Trimble Road. As an unsignalized intersection, the eastbound left-turn movement and southbound right-turn movements operate favorably with minimal delay during the p.m. peak hour.

**Table 2: Existing Operating Conditions – Major Intersections**

Intersection/Movement	PM Peak Hour
<b><i>Highway 63 Connector &amp; I-70 South Ramp Terminal (signalized)</i></b>	
Eastbound I-70 Exit Ramp	D (36.8)
Northbound Highway 63 Connector	B (18.2)
Southbound Highway 63 Connector	C (33.0)
<i>Overall Intersection</i>	<i>C (27.4)</i>
<b><i>Highway 63 Connector &amp; Conley Road/I-70 Drive SE (signalized)</i></b>	
Eastbound Conley Road	E (57.0)
Westbound I-70 Drive SE	F (>200)
Northbound Highway 63 Connector	C (32.6)
Southbound Highway 63 Connector	C (20.4)
<i>Overall Intersection</i>	<i>E (75.4)</i>
<b><i>Business Loop 70 &amp; Old Highway 63 (signalized)</i></b>	
Eastbound Business Loop 70	F (80.3)
Westbound Business Loop 70	A (4.9)
Northbound Old Highway 63	C (31.2)
<i>Overall Intersection</i>	<i>D (50.3)</i>
<b><i>Broadway &amp; Brickton Road (partial Stop)</i></b>	
Eastbound Broadway Left-Turn	A (9.7)
Southbound Brickton Road Right-Turn	B (12.4)
<b><i>Broadway &amp; Trimble Road (signalized)</i></b>	
Eastbound Broadway	B (12.8)
Westbound Broadway	B (18.7)
Northbound Trimble Road	B (17.7)
Southbound Trimble Road	C (23.0)
<i>Overall Intersection</i>	<i>B (16.7)</i>
<b><i>Brickton Road &amp; Trimble Road (all-way Stop)</i></b>	
Eastbound Trimble Road	C (19.0)
Westbound Trimble Road	C (15.6)
Northbound Brickton Road	C (12.5)
Southbound Brickton Road	C (15.7)
<i>Overall Intersection</i>	<i>C (15.1)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

### Broadway and Trimble Road

The intersection of Broadway and Trimble Road was recently signalized in conjunction with removing the traffic signal at Broadway and Brickton Road. Under signal control, the intersection operates effectively at LOS B overall during the p.m. peak hour and each approach operates at LOS C or better.

### Brickton Road and Trimble Road

The recent modifications along Broadway at Brickton and Trimble Roads have significantly alleviated congested conditions that previously existed at this location. The all-way stop currently operates at LOS C overall during the p.m. peak hour, with moderate delays averaging less than 20 seconds per vehicle on each approach.

In addition, the City of Columbia requested that the Broadway Marketplace access drives onto Conley Road be evaluated to verify the need for any improvements (particularly southbound right-turn lanes) as a result of this project. The existing operating conditions at each of the five Broadway Marketplace access drives are summarized in **Table 3**. In an effort to distinguish between the various drives, the name of the commercial business closest to the respective drive was utilized.

**Table 3: Existing Operating Conditions – Broadway Marketplace Driveways**

Intersection/Movement	PM Peak Hour
<b><i>Conley Road &amp; Wal-Mart Access Drive</i></b>	
Northbound Left-Turn	A (8.9)
Eastbound Approach	D (29.8)
<b><i>Conley Road &amp; Lowe's Access Drive</i></b>	
Northbound Left-Turn	A (8.7)
Eastbound Approach	D (25.3)
<b><i>Conley Road &amp; Sam's Access Drive</i></b>	
Northbound Left-Turn	A (8.2)
Eastbound Approach	B (13.3)
<b><i>Conley Road &amp; IHOP Access Drive</i></b>	
Northbound Left-Turn	A (8.2)
Eastbound Approach	B (14.0)
<b><i>Conley Road &amp; Longhorn Access Drive</i></b>	
Northbound Left-Turn	A (8.1)
Eastbound Approach	B (13.0)

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

From the existing traffic volumes presented in Exhibit 1, it is apparent that the two northernmost drives (Wal-Mart, Lowe's) are heavily utilized. Their eastbound approaches exiting onto Conley Road operate acceptably at LOS D, though the eastbound left-turn movement at the Lowe's Drive operates at LOS E. Conversely, volumes on the three southernmost drives (Sam's, IHOP, Longhorn) are light. All movements at these drives operate favorably at LOS C or better.

While outside the original scope of this study, the City of Columbia requested that the previous study evaluate the intersection of Broadway and Old Highway 63 to identify potential traffic flow improvements. Since that time, the City has implemented the previous study's recommendation that the southbound approach be expanded to provide for dual left-turn lanes. The intersection's operating conditions (including the dual southbound left-turn lanes) are summarized in **Table 4**. Three of the four intersection approaches previously operated at LOS E, but as a result of the additional capacity, they now operate acceptably at LOS D.

**Table 4: Existing Operating Conditions – Broadway & Old Highway 63**

Intersection/Movement	PM Peak Hour
<b><i>Broadway &amp; Old Highway 63 (signalized)</i></b>	
Eastbound Broadway	D (53.0)
Westbound Broadway	C (20.0)
Northbound Old Highway 63	C (33.8)
Southbound Old Highway 63	D (49.9)
<i>Overall Intersection</i>	<i>D (39.0)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

## **Base Traffic Conditions**

Prior to establishing forecasted conditions with the proposed redevelopment, it was necessary to identify other committed developments not captured by the 2006 traffic counts and account for the traffic that they would generate by opening year of the proposed redevelopment.

The 2006 study included two developments – Broadway Bluffs and Phase I of Centerstate Crossing – as approved projects not reflected by the traffic counts. The Broadway Bluffs, located in the northwest quadrant of Broadway and Trimble Road, was under construction in 2006 and has since been completed. The City of Columbia approved the project for uses generating traffic demand equivalent to 29,000 ft<sup>2</sup> of high-turnover sit-down restaurant as specified in “Trip Generation”, Eighth Edition. These trips were assigned to the study area road system in accordance with the project’s traffic impact study.

Phase I of Centerstate Crossing, located on the west side of Highway 63 between I-70 and Vandiver Drive, was partially operational in 2006. However, the trips that would be generated by the unbuilt portion (approximately 50%) of Phase I were assigned in accordance with the traffic impact study completed for that project. A total of 430 additional trips would be generated during the p.m. peak hour. However, it is important to emphasize that the majority of these trips would be distributed outside the study area (i.e., I-70, Highway 63 north, Vandiver Drive, etc.).

Since the completion of the previous study, a third development has come to fruition. Hy-Vee is currently under construction on the vacant MegaMarket site within the Broadway Marketplace. Hy-Vee would operate a grocery store totaling 77,722 ft<sup>2</sup>. The site was vacant in May 2006 when the traffic counts were performed, and the previous study did not account for the potential trip generation of the vacant space. However, because the store will occupy an existing site, a traffic impact study was not performed for the project.

The number of trips that would be generated by Hy-Vee was estimated using “Trip Generation”, Eighth Edition. Because the store is part of the Broadway Marketplace, the estimate was reduced by 20 percent to account for trips that would be “common” with existing tenants of the center and already present on the study area roads. After subtracting for “common” trips, a total of 590 trips would be generated during the p.m. peak hour.

A portion of the Hy-Vee trip generation was assumed to be “pass-by” in nature, representing store patrons already passing the site on Broadway that would stop on their way to another destination. “Pass-by” trips were assumed to comprise 20 percent of the store’s total trip generation. The resulting trip generation estimate for all three developments is summarized in **Table 5**. Collectively, the three developments would add 1,565 trips during the p.m. peak hour.

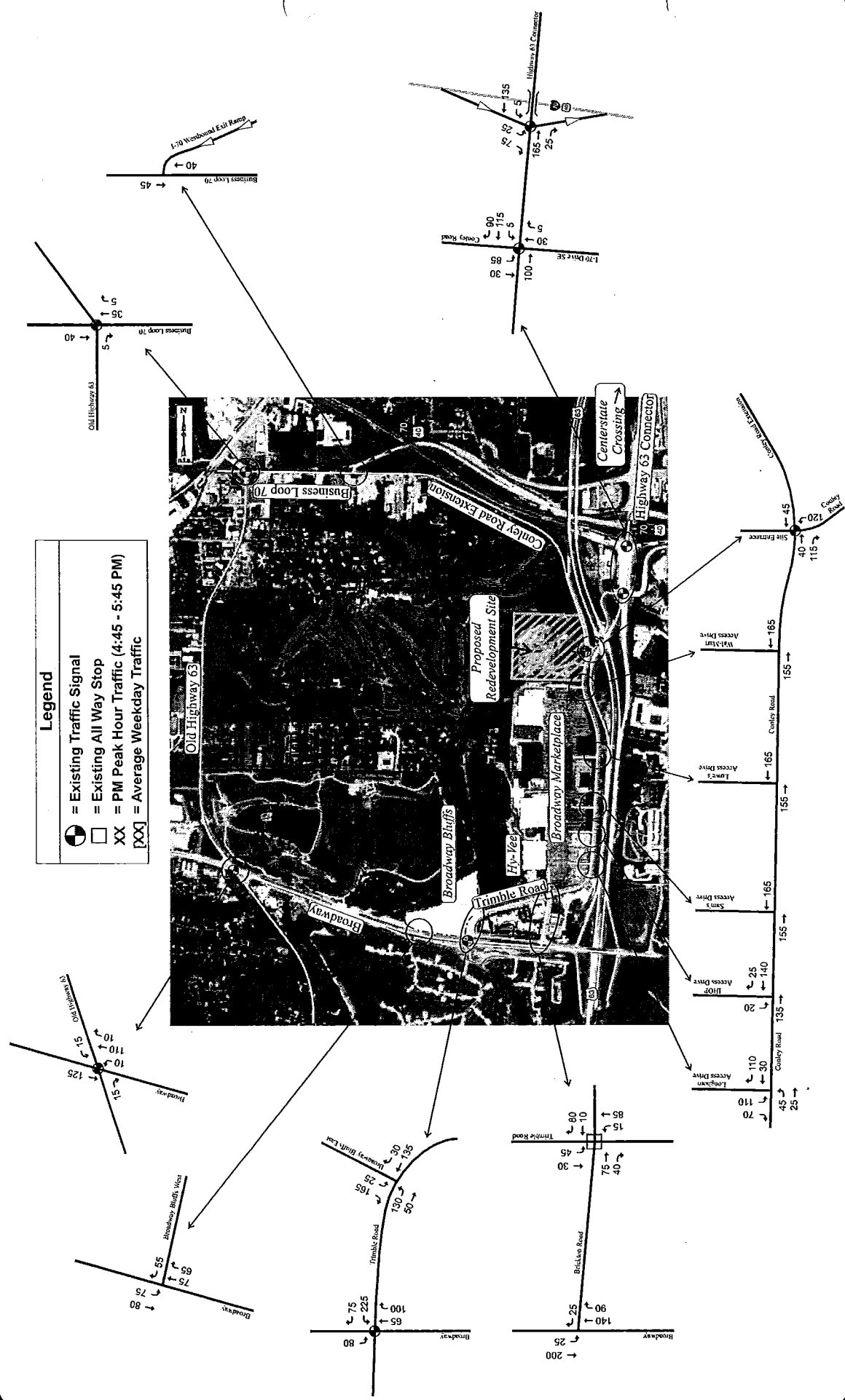
The Broadway Bluffs and Centerstate Crossing trips were assigned to the study area road system in accordance with the traffic impact study for each respective development. In the case of Hy-Vee, which does not have a traffic impact study, the trip distribution was assumed to mimic the distribution of existing Broadway Marketplace trips. The traffic generation of all three

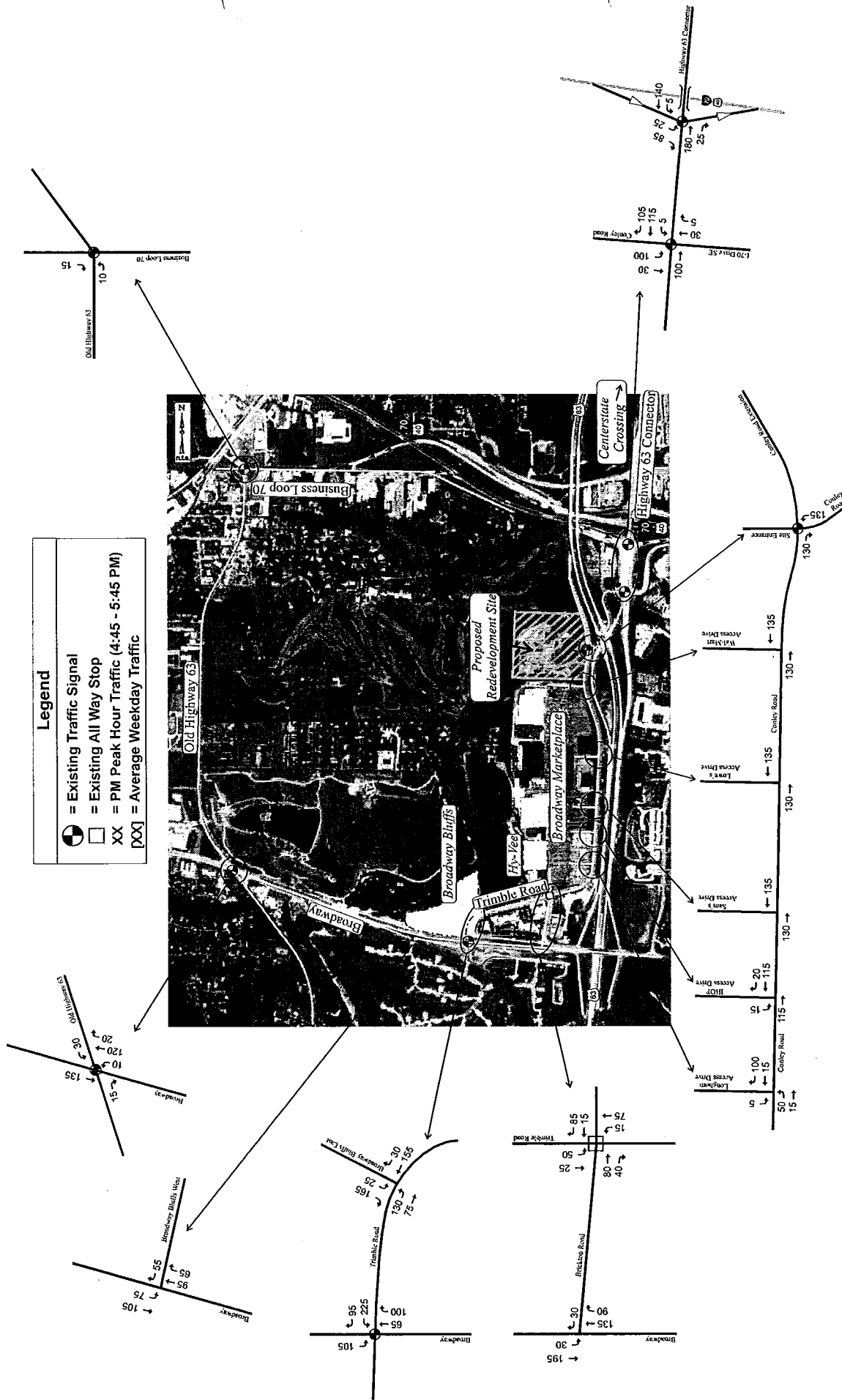
developments is shown in **Exhibit 2** and **Exhibit 3**. **Exhibit 2** shows traffic volumes assuming Conley Road is extended, and **Exhibit 3** shows traffic volumes with Conley Road not extended.

**Table 5: Trip Generation Projection – Other Committed Developments**

Land Use	Size	PM Peak Hour		
		In	Out	Total
Broadway Bluffs				
Restaurant	29,000 ft <sup>2</sup>	300	245	545
Centerstate Crossing Phase I				
Miscellaneous Future Uses		240	190	430
Hy-Vee at Broadway Marketplace				
Grocery Store	77,722 ft <sup>2</sup>	300	290	590
Total Trips		840	725	1,565







**Exhibit 3: Traffic Generated By Other Developments**  
(Broadway Bluffs, Centerstate Crossing & Hy-Vee) - Conley Road Not Extended

## **Proposed Redevelopment**

As a subsequent step in this analysis, forecasts were prepared for the proposed redevelopment by determining trip generation and directional distribution estimates. In order to achieve a consensus in the study methodology, the corresponding assumptions regarding trip generation, directional distribution and other traffic variables applied in this analysis were submitted to MoDOT and the City of Columbia in a memorandum dated June 22, 2006. The technical assumptions presented in that document were accepted by both agencies.

### ***Trip Generation***

As previously mentioned, the exact redevelopment plan is undefined at this time, and thus the exact uses that would ultimately develop on the site are unknown. However, it was previously assumed that the site could yield approximately 200,000 square feet of commercial uses. Based upon the minutes drafted for the traffic study scoping meeting held on April 21, 2006 and feedback to the trip generation memorandum dated June 22, 2006, the agencies accepted 200,000 square feet of commercial uses as the basis for this study's trip generation estimate.

The trip generation estimate was determined using data provided in the "Trip Generation Manual", Seventh Edition, published by the Institute of Transportation Engineers (ITE). This manual, which is a standard resource for transportation engineers, is based on a compilation of nationwide studies documenting the characteristics of various land uses. ITE Land Use Code #820, Shopping Center, was selected as a comparable land use category since ITE's definition for this category is consistent with the intended characteristics of the redevelopment.

Specifically, ITE's definition for Land Use Code #820 reads "a shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit." Furthermore, the description for the category states that centers of this nature could also include non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs and recreational facilities. Outparcels (peripheral buildings or pads located on the perimeter of a center adjacent to the streets or major access points) are also accounted for within the category. The resulting trip generation projection is summarized in **Table 6**.

**Table 6: Trip Generation Projection**

Use	Estimated Size	PM Peak Hour		
		In	Out	Total
Shopping Center	200,000 ft <sup>2</sup>	360	390	750
▪ New Trips (75%)		265	295	560
▪ Pass-by Trips (20%)		75	75	150
▪ Cross-Access Trips with Broadway Marketplace (5%)		20	20	40

However, the projections in Table 6 were adjusted to account for the fact that not all of the trips generated by the development would be *new* to the surrounding road system.

Specifically, the projections were adjusted to account for trips that would already be passing the site on the surrounding road system. Studies show that a portion of the traffic generated by commercial developments such as this would already be present on the adjacent roads and would be attracted to the development on their way to or from another destination (i.e., pass-by trips). The actual percentage of pass-by traffic depends upon the nature of the use, the volume on the adjacent street and the time of day.

Based upon statistical information provided in the "Trip Generation Handbook, A Recommended Practice", published by the Institute of Transportation Engineers (March 2001), it was estimated that as little as 20% to as much as 50% of the traffic generated by shopping centers during the p.m. peak period would be pass-by in nature. In an effort to be conservative, pass-by trips were assumed to comprise only 20% of the site-generated traffic.

Pass-by trips were drawn from existing traffic on Highway 63 connector only, since Conley Road serves as an access roadway for the Broadway Marketplace. The projections were further adjusted to account for a potential cross-access drive that would allow patrons of Broadway Marketplace to access the redevelopment site without using the external road system. As a result, those trips would not have any external impact. In an effort to be conservative, only 5% of the site-generated trips were assumed to be "common" with Broadway Marketplace and utilize the cross-access drive.

As can be seen from Table 6, the proposed development would generate a total of 750 trips during the weekday p.m. peak hour. A portion of these trips would utilize the cross-access drive to the Broadway Marketplace or would be pass-by in nature, so only 560 "new" trips would be generated during this peak hour.

### ***Directional Distribution***

The site-generated trips were assigned into and out of the site based upon the anticipated directional distribution of patrons. Travel patterns are expected to be similar to those associated with the existing Broadway Marketplace. The approximate distribution of traffic to/from the Broadway Marketplace was determined from the existing traffic counts at the intersections of Broadway with Brickton and Trimble Roads and Highway 63 Connector with Conley Road. Additionally, census data for the Columbia metropolitan area was used to identify "market areas" from which the proposed redevelopment would attract patrons.

Based upon the distribution of trips to/from Broadway Marketplace coupled with census data as well as experience with commercial developments of similar nature, the direction distribution of the site-generated trips was estimated in Table 7. The majority of the site-generated traffic (65%) would gravitate to/from Interstate 70 and Highway 63, the principal north-south and east-west routes in the area. More moderate amounts of traffic (13% from each roadway) are anticipated to/from Business Loop 70 and Broadway. Minor amounts of traffic would be oriented to/from Old Highway 63, Route B and I-70 Drive Southeast.

**Table 7: Directional Distribution Estimate**

Origin/Destination	Distribution Percentage
To/from the north on Highway 63 (north of Interstate 70)	20%
To/from the south on Highway 63	20%
To/from the west on Business Loop 70 (west of Route B)	13%
To/from the west on Interstate 70	12%
To/from the east on Interstate 70	8%
To/from the west on Broadway (west of Old 63)	8%
To/from the east on Broadway (east of Highway 63)	5%
To/from the east on I-70 Drive Southeast	5%
To/from Old Highway 63 (between Bus. Loop 70 & Broadway)	4%
To/from the north on Route B	3%
To/from the south on Old Highway 63 (south of Broadway)	2%

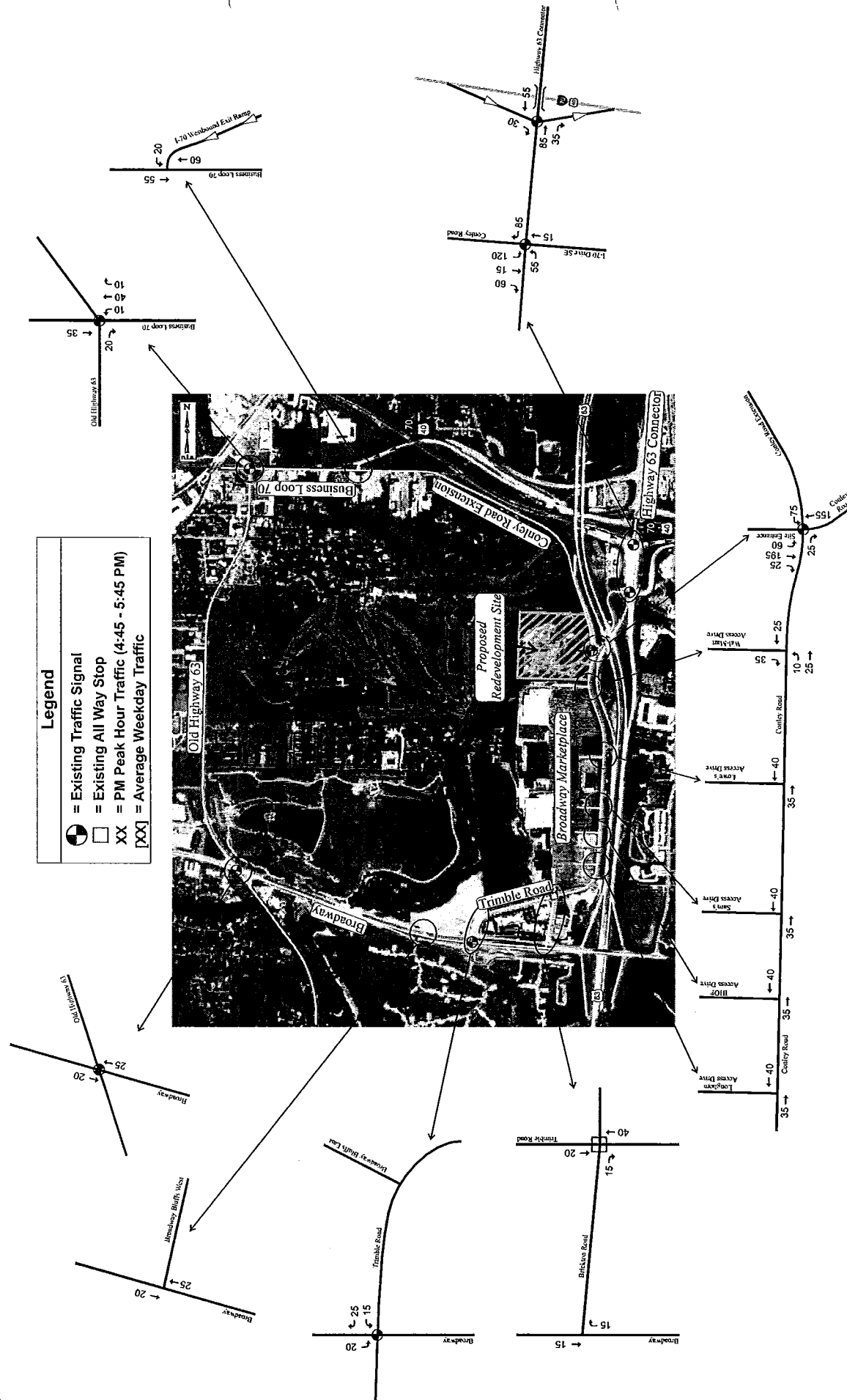
#### ***Proposed Site Access***

The primary means of access to the redevelopment site would be via the west leg of a new intersection with the Conley Road extension on the north leg and existing sections of Conley Road on the east and south legs. One additional access point is being contemplated to augment the main entrance, but its exact location and configuration has not been determined. As a result, the entire site-generated traffic was assigned to the site's main entrance or the cross-access drive with the Broadway Marketplace.

Providing a secondary access drive to the north of the main entrance would help disperse the site's traffic without violating common access management principles. Preferably, the drive should be located as close to the northern property line (280 feet from the centerline of the main entrance) as possible to minimize conflicts with the main entrance intersection and avoid being obstructed by queues. At a minimum, the drive should be located no less than 200 feet from the intersection.

Conversely, secondary access should not be considered south of the main entrance due to the heavy volumes on Conley Road and the limited spacing between the main entrance and the Wal-Mart entrance. However, a portion of the site's traffic (those oriented to/from the south on Conley Road) was assumed to use the existing Wal-Mart entrance and the site's cross-access drive with Broadway Marketplace in lieu of the main entrance. This assignment is reflected in the site-generated traffic forecasts.

Based upon the trip generation and directional distribution estimates and the site's proposed access configuration, site-generated traffic forecasts assuming the Conley Road extension is in place were developed as illustrated in **Exhibit 4**. During the weekday p.m. peak hour, the proposed redevelopment would add approximately 75 vph to Conley Road south of the site and about 350 vph to Conley Road between the site and Highway 63 connector. The redevelopment would also contribute approximately 135 vph to the Conley Road extension. Assuming Conley Road is not extended, site-generated traffic volumes are anticipated as depicted in **Exhibit 5**.



**Exhibit 4: Site-Generated Traffic Volumes - Conley Road Extended**

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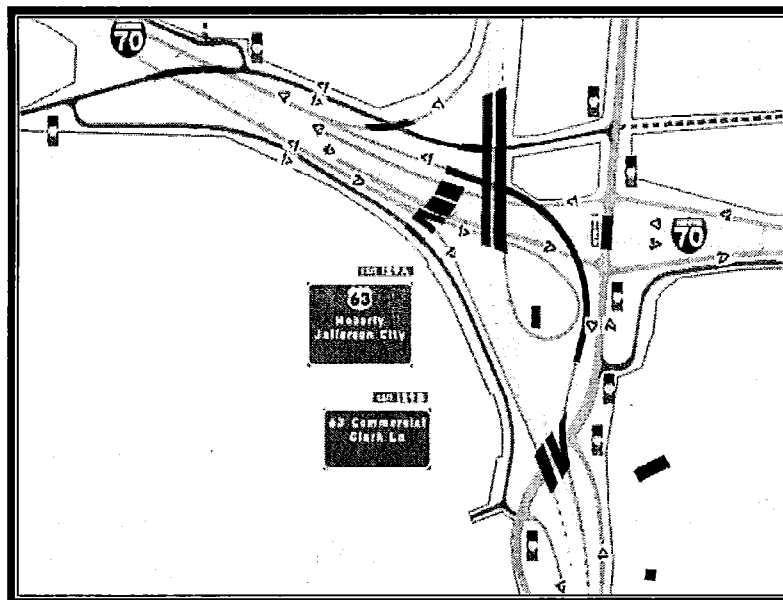


## **Proposed Conley Road Extension**

Given the current configuration of the local road network, access between arterial roadways to the northwest (Business Loop 70, Paris Road) and Conley Road is circuitous. Patrons of the Broadway Marketplace oriented to/from those roadways predominantly use I-70 or Clark Lane (I-70 north outer road between Highway 63 connector and Paris Road), both of which require travel through the I-70/Highway 63 interchange. Recall that the recent improvements to the interchange prevent vehicles entering westbound I-70 at Highway 63 from exiting at Business Loop 70.

The Conley Road extension would improve connectivity for communities to the northwest by providing an alternate means of access to not only the redevelopment site and Broadway Marketplace but also Highway 63 connector and I-70 Drive Southeast. Having said that, the feasibility of the Conley Road extension has become clouded by circumstances concerning right-of-way acquisition. Consequently, it is uncertain as to whether the extension can be completed in conjunction with the proposed redevelopment.

Extending Conley Road was initially proposed in conjunction with the "Improve I-70" studies, which have determined the location and basic configuration of the I-70 corridor within the Columbia region. The Environmental Impact Study for "Improve I-70" has been completed, though no funding has been allocated for design or construction. The "Improve I-70" recommended interchange configurations at Highway 63 and Business Loop 70 are depicted in **Figure 3**.



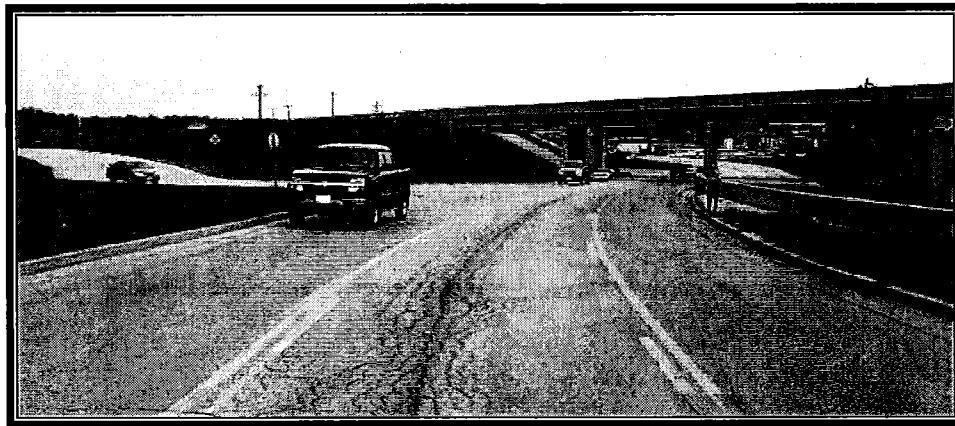
**Figure 3: "Improve I-70" Recommended Interchange Configurations**

As conceptually illustrated, direct access to I-70 at Business Loop 70 would be eliminated in lieu of extending Business Loop 70 eastward to intersect Highway 63 connector opposite Clark Lane.

As currently configured, both Business Loop 70 ramps are functionally obsolete from a safety perspective. The westbound ramp exits from the left side of I-70, and the spacing between the eastbound ramp and the Highway 63 interchange is inadequate, which produces a hazardous weaving segment on I-70.

In conjunction with the Conley Road extension, MoDOT has required that the eastbound entrance ramp from Business Loop 70 to I-70 be closed, though the westbound exit ramp would remain open. If Conley Road cannot be extended as part of the proposed redevelopment, it is presumed that the ramp would remain open until such time that Conley Road is extended or the "Improve I-70" enhancements are implemented.

As previously depicted in Figure 1, the extension of Conley Road would originate at the existing terminus of the stub street (also known as Conley Road) that provides access to property north of the MoDOT facility. This street was created as a stub when previous improvements extended Conley Road to Highway 63 connector opposite I-70 Drive Southeast. The intersection of Conley Road and the stub street (Conley Road) is shown in **Figure 4**.



**Figure 4: Conley Road Intersection with Stub Street (Conley Road)**

From the terminus of the stub street, Conley Road would be extended northwardly where it would intersect Business Loop 70 in the vicinity of East Boulevard and the I-70 eastbound entrance ramp. The Conley Road extension is proposed as a two-lane facility adjoining the redevelopment site and as a three-lane facility north and west of Hinkson Creek. It is anticipated that the road would be designed to City of Columbia standards with a 35 mph design speed.

Given the extension of Conley Road and the closure of the eastbound ramp from Business Loop 70, traffic is expected to divert from I-70, Highway 63 connector, Clark Lane, and Broadway to the Conley Road extension. For example, motorists currently traveling eastbound on Business Loop 70 destined to the Broadway Marketplace would use the Conley Road extension instead of I-70 and Highway 63 connector.

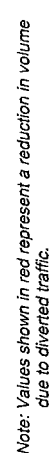
The amount of traffic that would divert was estimated based upon output from the City's travel demand model, a limited origin-destination study, and prevailing travel patterns in the area. The City of Columbia provided output files from their travel demand model for scenarios reflecting

the current and proposed roadway system. By comparing traffic volumes from each scenario, the incremental increase or decrease in traffic on each roadway link (due to the Conley Road extension and Business Loop 70 ramp closure) was estimated.

In an effort to validate the results provided by the travel demand model, a limited origin-destination study using license plate identification was conducted to estimate prevailing traffic patterns in the study area. Specifically, the study attempted to identify the number of vehicles traveling eastbound on Business Loop 70 (at I-70) and then southbound on Conley Road (near Wal-Mart), presumably via the I-70/Highway 63 interchange. Similarly, traffic in the opposite direction traveling northbound on Conley Road (near Wal-Mart) and then westbound on Clark Lane (west of Highway 63 connector) via the I-70/Highway 63 interchange was also estimated.

The study results indicate that approximately 11% of southbound traffic on Conley Road originated from eastbound Business Loop 70 and that about 6% of northbound traffic on Conley Road was destined to westbound Clark Lane. The results of the origin-destination study appear to support output from the travel demand model. Principally, the model output indicates that approximately 14% of southbound traffic on Conley Road near Wal-Mart would divert to the Conley Road extension from the previous route via Business Loop 70, I-70 and Highway 63 connector. This result is consistent with the 11% result from the origin-destination study.

Lastly, the estimated diversions were reviewed for sensibility. As expected, decreases in volume occurred on Broadway, eastbound Business Loop 70, Highway 63 connector and exiting eastbound I-70 at Highway 63. Likewise, increases in volume are predicted on westbound Business Loop 70, eastbound Conley Road at Highway 63 connector and the ramp from Highway 63 to eastbound I-70. **Exhibit 6** shows the p.m. peak hour traffic diversions that are expected as a result of the Conley Road extension.



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## **2010 Forecasted Conditions**

In order to evaluate the impact of the proposed redevelopment, traffic forecasts were developed for the opening year, assumed to be 2010. Forecasts were prepared both with and without the Conley Road extension in order to determine the necessity of the extension. 2010 forecasted traffic volumes are illustrated in **Exhibit 7** with Conley Road extended and in **Exhibit 8** with Conley Road not extended. Base traffic generated by Broadway Bluffs, Centerstate Crossing Phase I, and Hy-Vee developments as well as four years of background traffic growth are reflected in both forecasts.

Background growth was estimated by comparing 2030 and 2006 travel demand model volume output. Depending on the roadway, annual growth rates varied from 1% to 2%. In accordance with the model output, 1% growth was applied at intersections along Conley Road, the Conley Road extension, Business Loop 70 and I-70 Drive Southeast; 1.5% growth was applied at intersections along Broadway; and 2% growth was applied along Highway 63 connector and on the I-70 ramps.

Once 2010 traffic forecasts were established, operating conditions were then reanalyzed to determine the impact of the proposed redevelopment. Roadway and traffic control improvements were prescribed to mitigate any impacts, as described below.

### ***Proposed Improvements – Conley Road Extended***

**Exhibit 9** depicts the improvements that would be made to the existing road system to mitigate the impacts of the proposed redevelopment assuming Conley Road is extended. The improvements are described as follows:

- Construct a four-leg signalized intersection adjacent to the redevelopment site, thereby rerouting the current Conley Road alignment through the intersection's south and east legs (Conley Road to/from Highway 63 connector would exit/enter on the east leg). The main entrance to the site would occupy the west leg, and the Conley Road extension would depart from the north leg. The proposed intersection should be constructed with the following laneage:
  - **Northbound Approach:** one left-turn, one through, and one right-turn lane ;
  - **Southbound Approach:** one left-turn, one shared through/right-turn lane ;
  - **Eastbound Approach:** one left-turn, one through, one right-turn lane ; and
  - **Westbound Approach:** one left-turn, one shared through/right-turn lane.

The intersection's west leg should be constructed with a pavement width of at least 60 feet for compatibility with future 2030 improvements (described in detail in a subsequent section). Initially, four lanes should be constructed leaving a section to be striped out on the north side of the drive. The intersection's traffic signal should operate based on actuated-uncoordinated timing plans. All left-turn movements should receive protected-plus-permissive signal phasing.



# Legend

- = Existing Traffic Signal
- = Proposed Traffic Signal
- = Proposed Roundabout
- XX = PM Peak Hour Traffic (4:45 - 5:45 PM)

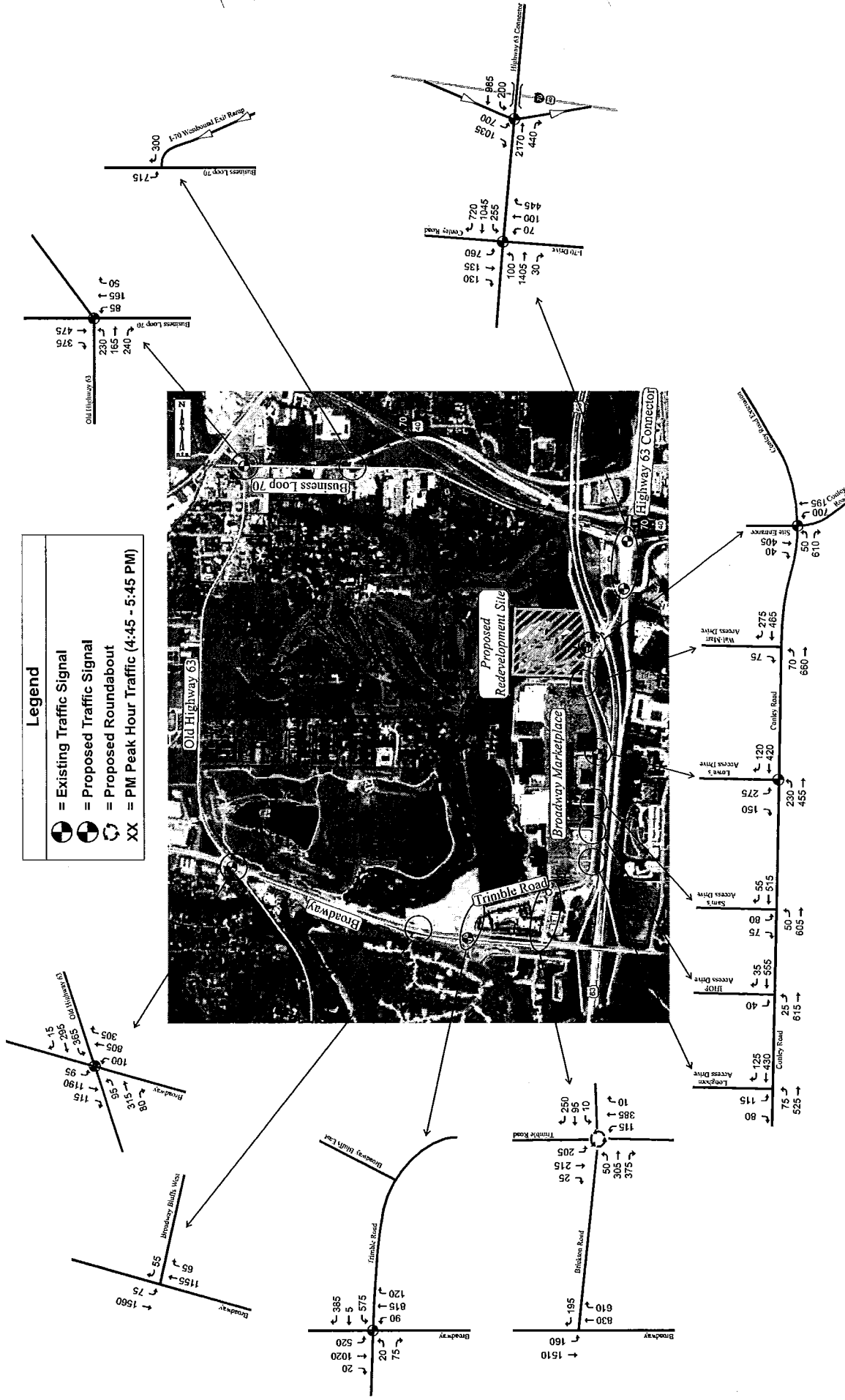
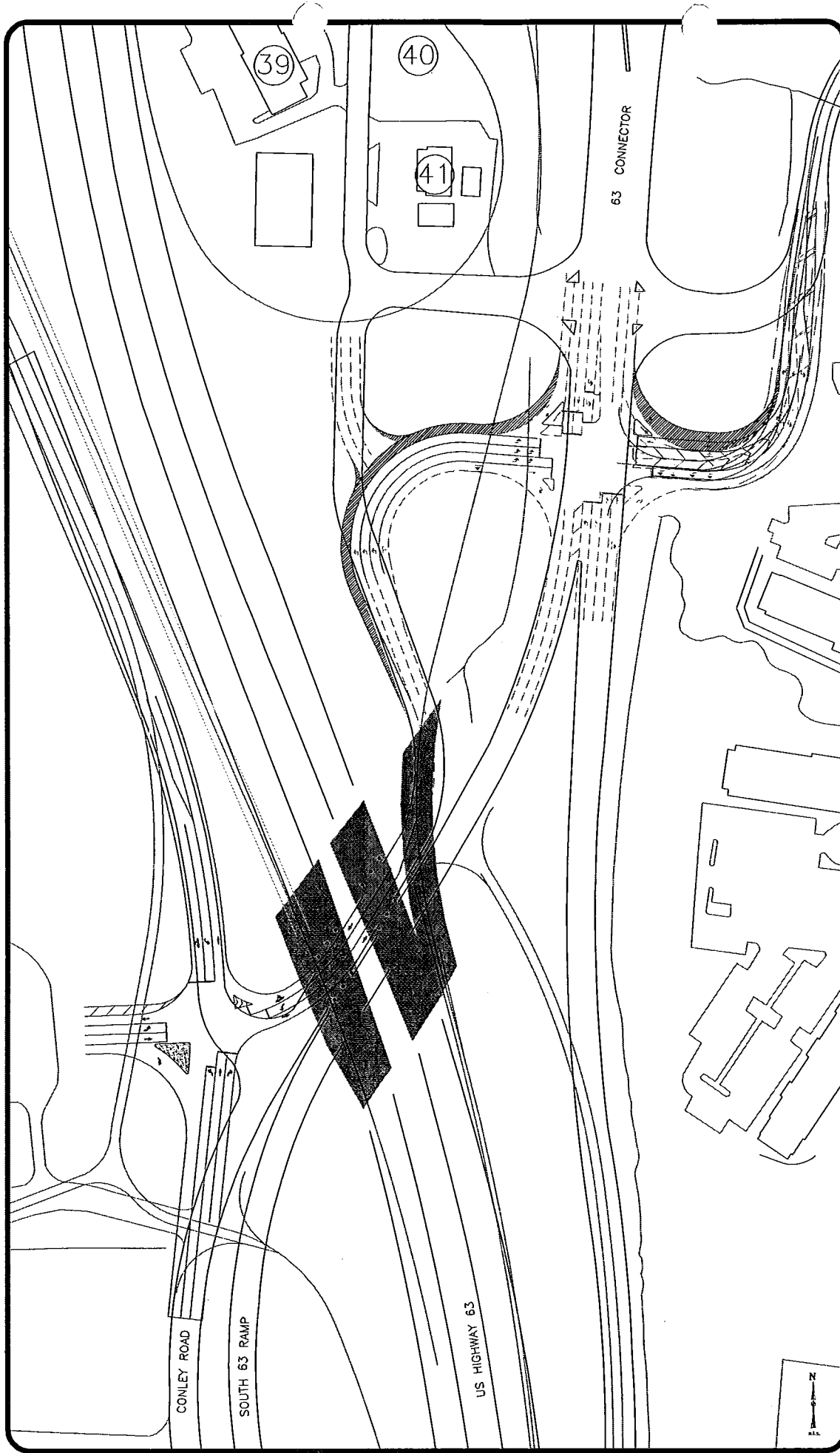


Exhibit 8: 2010 Forecasted Traffic Volumes - Conley Road Not Extended

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**Exhibit 9: Proposed 2010 Improvement Plan**

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**CBB** Crawford, Bunte, Brammeier  
 Traffic and Transportation Engineers

- ❑ Widen the eastbound Conley Road approach to Highway 63 connector to accommodate triple left-turn lanes. Since three receiving lanes are in place on Highway 63 connector, additional pavement should be needed on Conley Road only, though modifications to pavement markings and signal equipment would likely be needed. Signage directing motorists to the appropriate left turn lane commensurate with their ultimate destination should be provided. The left-most lane should direct motorists to I-70 westbound; the center lane should direct motorists to Highway 63 north and Clark Lane; and the right-most lane should serve those destined to I-70 eastbound.
- ❑ Widen the westbound I-70 Drive Southeast approach (opposite Conley Road) to Highway 63 connector to provide for a dedicated right-turn lane, thereby separating right-turning and through traffic and facilitating a favorable alignment with the eastbound triple left-turn lanes.
- ❑ Given that the eastbound Business Loop 70 ramp to I-70 would be closed, no improvements would be needed at the Business Loop 70 junction with the Conley Road extension and I-70 westbound exit ramp.

Improvements were identified for the Broadway Marketplace access drives onto Conley Road as follows:

- ❑ Convert the existing Wal-Mart access drive onto Conley Road to three-quarters access, whereby the left-turn movement exiting the Broadway Marketplace would be prohibited. The displaced left-turning vehicles would access northbound Conley Road at the Lowe's drive to the south or at the main entrance to the redevelopment site via a potential cross-access drive. To enforce the left-turn restriction and achieve a desirable level of compliance, the installation of a median on Conley Road is suggested.
- ❑ In conjunction with retrofitting the Wal-Mart drive for three-quarters access, construct a dedicated southbound right-turn lane on Conley Road at the entrance to serve the heavy volumes of traffic entering from the north.
- ❑ Signalize the existing Lowe's drive onto Conley Road and construct a southbound right-turn lane on Conley Road at the drive. To support signalizing the intersection, the Lowe's access drive should be widened from 35 feet to 40 feet to allow two 12.5-foot egress lanes and one 15-foot ingress lane. The Wal-Mart drive should not be restricted to three-quarters access unless the Lowe's drive can be signalized to accommodate the displaced vehicles.
- ❑ Construct a roundabout at the intersection of Trimble Road and Brickton Road to alleviate congestion that is expected once Hy-Vee is operational. *It must be emphasized that this improvement is not necessary to mitigate the impact of the proposed redevelopment. Rather the need for a roundabout is driven by the additional traffic that would be generated by Hy-Vee.* A single-lane roundabout with a northbound right-turn by-pass is recommended, though the design should accommodate future expansion to two circulating lanes.

***Improvement Considerations – Conley Road Not Extended***

Should Conley Road not be extended, the improvements identified in the preceding section would still be needed. The roadway's absence would trigger one minor change in traffic signal phasing at the site's main entrance intersection with Conley Road. The corresponding reduction in north-south through traffic at the intersection would eliminate the need for protected northbound and southbound left-turn phasing. All northbound and southbound movements could operate under a common green phase.

***Forecasted Operating Conditions***

2010 intersection operating conditions were reanalyzed using the same methodology applied to the existing traffic volumes. This was done in an effort to identify the impacts of the proposed redevelopment; to evaluate the adequacy of the proposed roadway and traffic control improvements to mitigate those impacts; and to determine whether the Conley Road extension is necessary to accommodate the proposed redevelopment.

**Table 8** summarizes the forecasted Levels of Service and average delay at each of the major study intersections during the weekday p.m. peak hour assuming the implementation of the proposed roadway and traffic control improvements noted above. Scenarios with and without the Conley Road extension were evaluated. As can be seen, all intersections would operate acceptably overall (LOS D or better) in either scenario. Specific locations within the study area warrant more detailed discussion, as follows:

Highway 63 Connector and Conley Road/I-70 Drive SE

The recommended improvements would provide additional capacity on the eastbound and westbound approaches to the intersection. As a result, overall operations would improve from LOS E under existing conditions to LOS D in both 2010 forecasted traffic volumes scenarios (with and without Conley Road extended).

Conley Road and Conley Road Extension/Site Main Entrance

Regardless of whether Conley Road is extended, this intersection would operate acceptably at LOS C overall. However, if Conley Road is extended, much of the intersection's reserve capacity would be consumed, leaving little flexibility to serve heavier traffic volumes than anticipated. In that scenario, priority should be assigned to the northbound right-turn and westbound left-turn movements by programming the traffic signal to "dwell" on those phases. This would minimize delays to the heaviest movements, thereby maximizing the overall efficiency of the intersection.

If Conley Road is not extended, overall delays would be approximately 30 percent lower because fewer vehicles would use the intersection. This would reduce the number of signal phases needed, resulting in greater operational flexibility and less "lost" time due to phase changes.

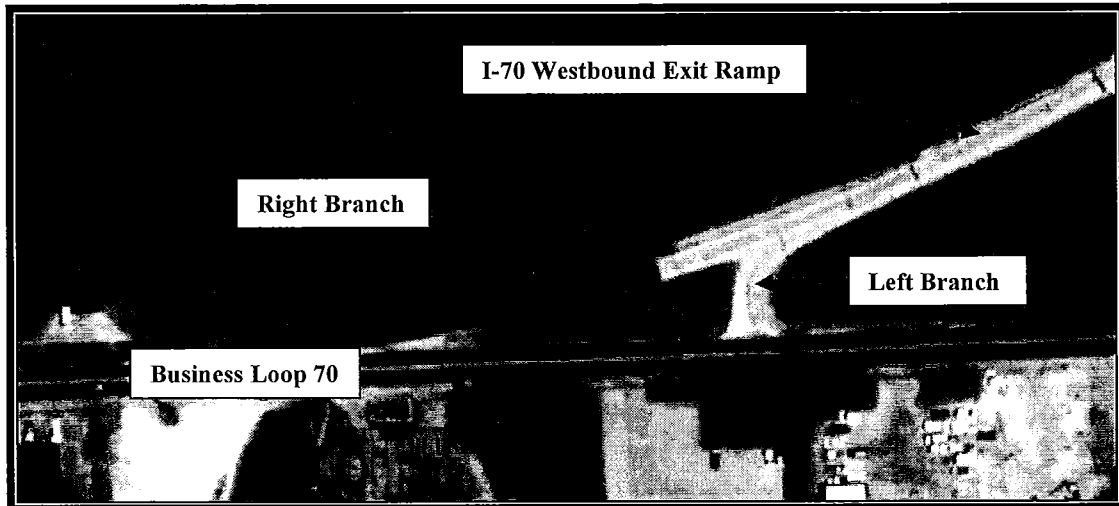
**Table 8: 2010 Forecasted Operating Conditions (PM Peak Hour) – Major Intersections**

Intersection/Movement	Conley Road Extended	Conley Road <u>Not</u> Extended
<b>Highway 63 Connector &amp; I-70 South Ramp Terminal (signalized)</b>		
Eastbound I-70 Exit Ramp	D (40.5)	D (46.8)
Northbound Highway 63 Connector	C (26.2)	C (34.0)
Southbound Highway 63 Connector	D (35.5)	D (36.4)
<i>Overall Intersection</i>	<i>C (32.5)</i>	<i>D (38.6)</i>
<b>Highway 63 Connector &amp; Conley Road/I-70 Drive SE (signalized)</b>		
Eastbound Conley Road	E (71.5)	E (65.3)
Westbound I-70 Drive SE	F (88.1)	F (82.7)
Northbound Highway 63 Connector	D (50.1)	E (74.5)
Southbound Highway 63 Connector	B (19.8)	B (19.8)
<i>Overall Intersection</i>	<i>D (49.8)</i>	<i>D (53.0)</i>
<b>Conley Road &amp; Conley Road Ext./Site Main Entrance (signalized)</b>		
Eastbound Site Main Entrance	D (40.2)	C (31.6)
Westbound Conley Road	C (29.7)	B (16.0)
Northbound Conley Road	C (22.3)	C (25.3)
Southbound Conley Road Extension	D (47.6)	D (35.7)
<i>Overall Intersection</i>	<i>C (33.1)</i>	<i>C (22.6)</i>
<b>Business Loop 70 &amp; Old Highway 63 (signalized)</b>		
Eastbound Business Loop 70	D (40.4)	D (42.3)
Westbound Business Loop 70	B (17.5)	A (8.0)
Northbound Old Highway 63	D (40.3)	D (44.9)
<i>Overall Intersection</i>	<i>C (33.0)</i>	<i>D (37.4)</i>
<b>Business Loop 70 &amp; I-70 Westbound Exit Ramp (unsignalized)</b>		
I-70 Exit Ramp Southbound Left-Turn	C (17.9)	N/A
<b>Broadway &amp; Brickton Road (partial Stop)</b>		
Eastbound Broadway Left-Turn	B (11.1)	B (11.3)
Southbound Brickton Road Right-Turn	B (14.1)	C (15.4)
<b>Broadway &amp; Trimble Road (signalized)</b>		
Eastbound Broadway	B (16.0)	B (12.0)
Westbound Broadway	B (19.9)	C (25.7)
Northbound Trimble Road	C (25.1)	C (25.3)
Southbound Trimble Road	C (26.5)	C (24.8)
<i>Overall Intersection</i>	<i>C (20.0)</i>	<i>B (19.6)</i>
<b>Brickton Road &amp; Trimble Road (roundabout)</b>		
Eastbound Trimble Road	A (9.7)	A (9.8)
Westbound Trimble Road	B (14.9)	C (21.1)
Northbound Brickton Road	A (7.4)	A (8.4)
Southbound Brickton Road	A (9.9)	B (13.2)
<i>Overall Intersection</i>	<i>B (10.1)</i>	<i>B (12.7)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

#### Business Loop 70 and I-70 Westbound Exit Ramp

The current two-lane configuration of Business Loop 70 through the intersection (see **Figure 5**) would appropriately transition to the Conley Road extension further east. The I-70 westbound exit ramp could also be retained in its existing divergent configuration.



**Figure 5: Intersection of Business Loop 70 and I-70 Westbound Exit Ramp**

The right branch would continue to serve westbound Business Loop 70, and the left branch would serve vehicles destined to the Conley Road extension. The left branch forms a 'T' intersection with Business Loop 70 and operates under STOP control. Business Loop 70 traffic is not required to stop. Under this configuration, the left-turn movement exiting I-70 would operate favorably at LOS C during the p.m. peak hour, and no improvements or modifications would be necessary. Similarly, if Conley Road is not extended, the eastbound I-70 on-ramp remains open and the intersection functions as it does today.

**Table 9** summarizes the forecasted Levels of Service and average delay at each of the Broadway Marketplace access drive intersections during the weekday p.m. peak hour. The operating conditions at the Wal-Mart and Lowe's drives reflect the implementation of the proposed roadway and traffic control improvements noted above. As can be seen, each intersection approach would operate acceptably (LOS D or better) with or without the Conley Road extension.

#### Conley Road and Wal-Mart Access Drive

As previously discussed, full access at this intersection would be reduced to three-quarters access, whereby left-turns exiting the site would be prohibited. With that restriction in place, only two movements (northbound left-turn and eastbound right-turn) would be required to yield to other movements. These movements would operate favorably during the p.m. peak hour at LOS A and LOS B, respectively.

**Table 9: 2010 Forecasted Operating Conditions (PM Peak Hour) – Broadway Marketplace Driveways**

Intersection/Movement	Conley Road Extended	Conley Road <u>Not</u> Extended
<b>Conley Road &amp; Wal-Mart Access Drive</b>		
Northbound Left-Turn	B (11.2)	A (9.8)
Eastbound Right-Turn	B (13.3)	B (12.4)
<b>Conley Road &amp; Lowe's Access Drive (signalized)</b>		
Eastbound Approach	C (23.2)	C (20.7)
Northbound Approach	A (8.9)	A (8.4)
Southbound Approach	B (17.1)	B (18.5)
<i>Overall Intersection</i>	<i>B (15.4)</i>	<i>B (14.8)</i>
<b>Conley Road &amp; Sam's Access Drive</b>		
Northbound Left-Turn	A (9.5)	A (9.7)
Eastbound Approach	C (20.8)	C (20.4)
<b>Conley Road &amp; IHOP Access Drive</b>		
Northbound Left-Turn	A (9.1)	A (9.4)
Eastbound Approach	C (19.0)	C (20.6)
<b>Conley Road &amp; Longhorn Access Drive</b>		
Northbound Left-Turn	A (8.8)	A (9.0)
Eastbound Approach	C (23.9)	D (26.9)

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

#### Conley Road and Lowe's Access Drive

Traffic displaced from the Wal-Mart drive due to the left-turn restriction is expected to gravitate to the Lowe's drive. Consequently, it was recommended that the intersection of the Lowe's access drive with Conley Road be signalized and that a southbound right-turn lane be constructed on Conley Road.

The signal should operate with protected-plus-permissive phasing for the northbound left-turn movement. This will afford patrons a designated opportunity to enter the Broadway Marketplace during each signal cycle. The intersection overall would operate favorably at LOS B, and the 95<sup>th</sup> percentile queue (237 feet) for the exiting eastbound left-turn movement could be accommodated within the available throat distance on the Lowe's Drive before the first internal intersection.

Based on the preceding analyses, the prescribed improvements would effectively mitigate the impacts of the proposed redevelopment and adequately serve projected traffic demands both with and without the Conley Road extension. While the proposed extension constitutes a regional connectivity enhancement, *its implementation is not necessary to accommodate traffic generated by the proposed redevelopment*. In fact, operating conditions at most study area intersections would not be significantly affected by the Conley Road extension or its absence.

The additional traffic generated by Hy-Vee would be adequately accommodated by the recommended improvements. It should be emphasized that improvements would be needed at

the intersection of Brickton and Trimble by 2010 in order to mitigate the impact of Hy-Vee. In the previous study, improvements were not identified at that location until 2030.

Likewise, the intersection of Broadway with Old Highway 63 was reanalyzed, and the forecasted Levels of Service and average delay are summarized in **Table 10** for scenarios both with and without the Conley Road extension. The intersection would continue to operate at LOS D overall in 2010, although some approaches would degrade to LOS E. The ability to improve upon these conditions and add capacity is limited by right-of-way constraints and access drives for adjacent businesses. While likely infeasible, the addition of eastbound and westbound right-turn lanes on Broadway and a northbound right-turn lane on Old Highway 63 would reduce delays.

**Table 10: 2010 Forecasted Operating Conditions (PM Peak Hour) – Broadway & Old Highway 63**

Intersection/Movement	Conley Road Extended	Conley Road <u>Not</u> Extended
<i><b>Broadway &amp; Old Highway 63 (signalized)</b></i>		
Eastbound Broadway	D (52.6)	E (58.3)
Westbound Broadway	B (15.8)	C (22.0)
Northbound Old Highway 63	E (64.0)	E (75.9)
Southbound Old Highway 63	D (49.5)	E (66.6)
<i>Overall Intersection</i>	<i>D (42.6)</i>	<i>D (50.4)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)



## **2030 Forecasted Conditions**

An analysis of “design year” 2030 conditions was completed to determine the ability of the area road system to accommodate long-term traffic demands. Any additional improvements required by 2030 should not be construed as the responsibility of the proposed redevelopment, but rather these are recommendations to help the review agencies plan for the future.

### ***Forecasted Traffic Volumes***

Forecasted traffic volumes were developed for the Year 2030 based on output from the City’s travel demand model. Specifically, volume output from the 2030 model was compared with the 2006 model and corresponding rates of growth were computed. Depending on the roadway, annual growth rates varied from 1% to 2%. In accordance with the model output, 1% growth was applied at intersections along Conley Road, the Conley Road extension, Business Loop 70 and I-70 Drive Southeast; 1.5% growth was applied at intersections along Broadway; and 2% growth was applied along Highway 63 connector and on the I-70 ramps.

The City’s 2030 travel demand model includes the “Improve I-70” interchange configuration at Highway 63 and I-70. As a result, the growth exhibited by the 2030 output reflects the additional capacity provided by improved configuration. Without the improvements, it stands to reason that a lower rate of growth would occur due to constraints imposed by the existing interchange configuration. In fact, demand for certain movements would exceed the capacity of the existing Highway 63 connector intersections with Conley Road and the I-70 ramps prior to 2030, and therefore a 2% growth rate is not sustainable with the existing capacity.

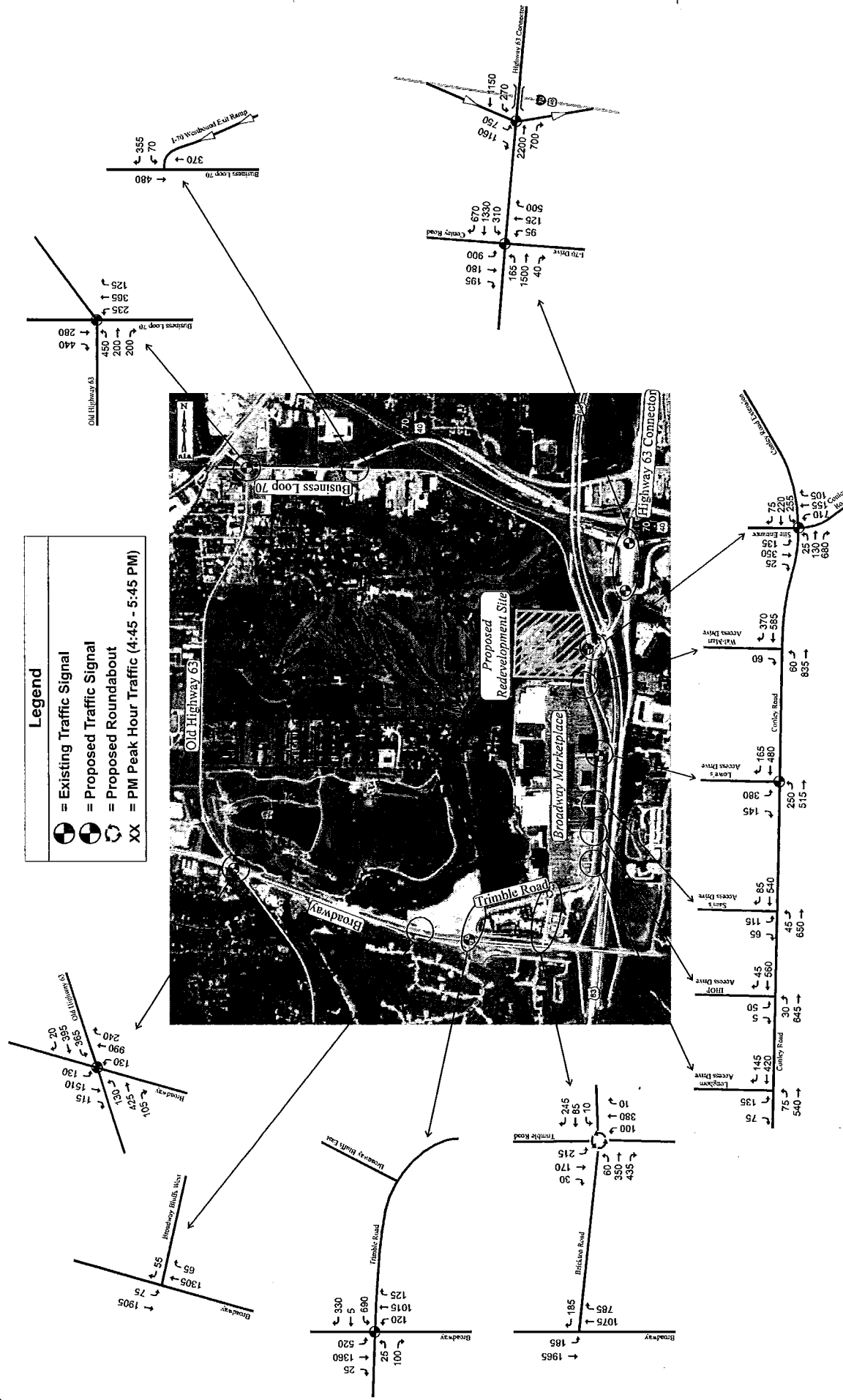
To that end, traffic growth was applied to the intersections of Highway 63 connector with Conley Road and with the I-70 ramps using the following procedure. Movements to/from Conley Road and I-70 Drive Southeast were increased in accordance with the 1% annual growth rate computed for those roadways from the travel demand model. Once the traffic volume approached the theoretical capacity of any specific movement, further growth of that movement was halted.

Through traffic along Highway 63 connector and movements to/from I-70 were increased using a more fluid procedure that assumed the annual volume increase would range from 0.5% to 1.5%, albeit less than the 2% predicted by the travel demand model. Volumes were not increased beyond the capacity of a particular movement. For movements where capacity was not exceeded, the 2030 volume was determined assuming a 1.5% annual growth rate in an effort to be conservative.

2030 forecasted traffic volumes assuming Conley Road is extended are illustrated in **Exhibit 10**. Volumes without Conley Road extended are summarized in **Exhibit 11**.

**Legend**

- Existing Traffic Signal
- Proposed Traffic Signal
- Proposed Roundabout
- XX = PM Peak Hour Traffic (4:45 - 5:45 PM)

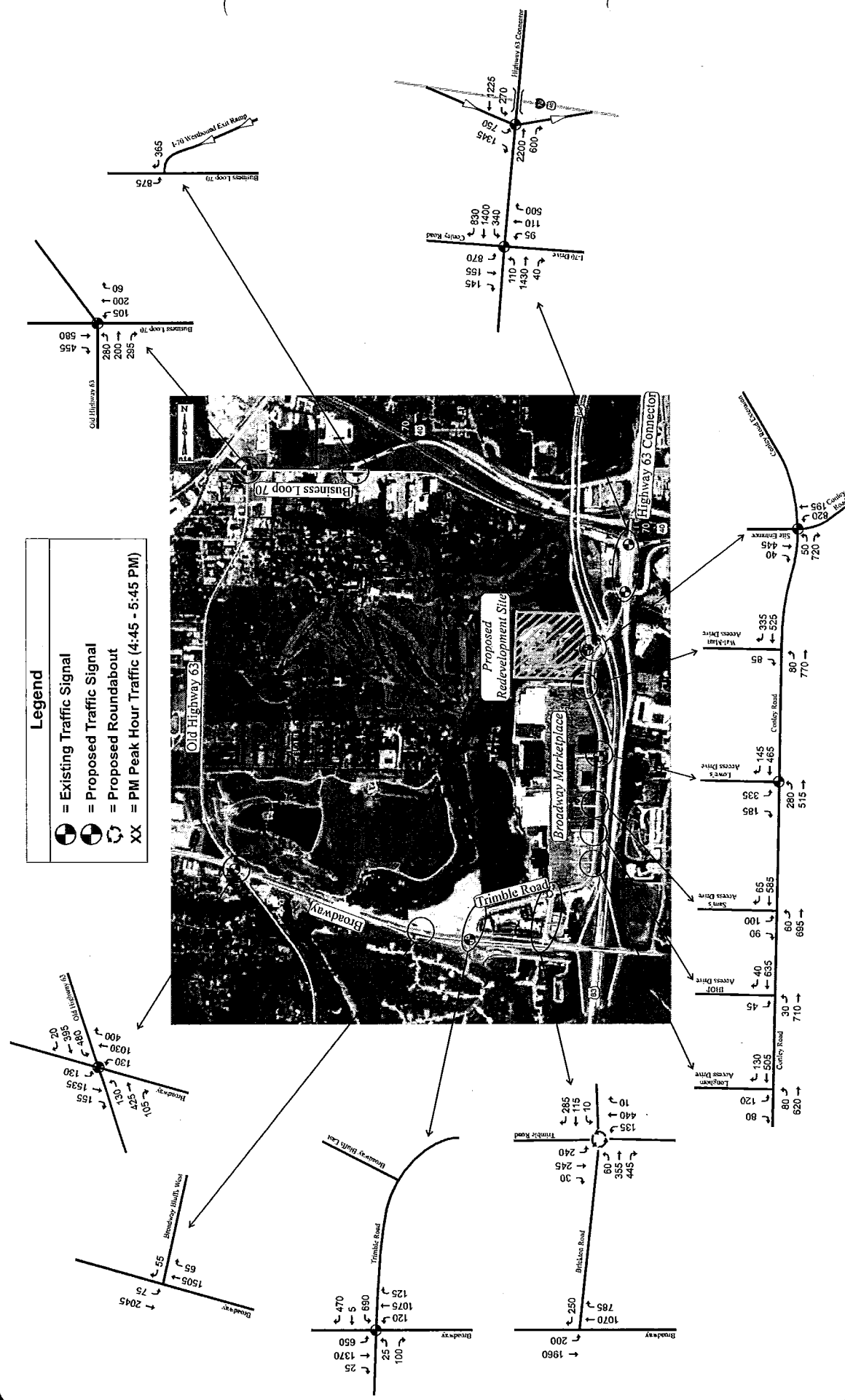


**Exhibit 10: 2030 Forecasted Traffic Volumes - Conley Road Extended**

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# Legend

- = Existing Traffic Signal
- ◐ = Proposed Traffic Signal
- ◑ = Proposed Roundabout
- XX = PM Peak Hour Traffic (4:45 - 5:45 PM)



**Exhibit 11: 2030 Forecasted Traffic Volumes - Conley Road Not Extended**

Redevelopment of the MoDOT Maintenance Facility and  
 Conley Road Extension  
 Columbia, Missouri  
 Job# 187-09  
 1/05/10

Based on the growth rate range of 0.5% and 1.5% applied along Highway 63 connector, timeframes for when each movement would approach capacity were estimated. Timeframes were estimated for scenarios both with and without extending Conley Road. Assuming Conley Road is extended, traffic demand for the following movements at Highway 63 connector and Conley Road/I-70 Drive Southeast would approach capacity prior to 2030:

- ❑ Eastbound Left-Turn Movement: demand would approach capacity by approximately 2023 based on 1% annual growth;
- ❑ Northbound Through Movement: demand would approach capacity by approximately 2017 – 2030 based on 1.5% and 0.5% annual growth respectively; and
- ❑ Westbound Through Movement: demand exceeds capacity under 2010 conditions.

Likewise, demand for the following movements at Highway 63 connector and the I-70 south ramp terminal would approach capacity prior to 2030:

- ❑ Northbound Through Movement: demand would approach capacity by approximately 2016 – 2028 based on 1.5% and 0.5% annual growth respectively; and
- ❑ Eastbound Left-Turn Movement: demand would approach capacity by approximately 2019 based on 1.5% annual growth respectively.

Assuming Conley Road is not extended, traffic demand for the following movements at Highway 63 connector and Conley Road/I-70 Drive Southeast would approach capacity prior to 2030:

- ❑ Westbound Right-Turn Movement: demand would approach capacity by approximately 2022 based on 1% annual growth; and
- ❑ Northbound Through Movement: demand would approach capacity by approximately 2011 – 2013 based on 1.5% and 0.5% annual growth respectively.

Likewise, demand for the following movements at Highway 63 connector and the I-70 south ramp terminal would approach capacity prior to 2030:

- ❑ Northbound Through Movement: demand would approach capacity by approximately 2011 – 2013 based on 1.5% and 0.5% annual growth respectively; and
- ❑ Eastbound Left-Turn Movement: demand would approach capacity by approximately 2015 – 2025 based on 1.5% and 0.5% annual growth respectively.

### ***Recommended Improvements***

Capacity analyses were repeated using the 2030 traffic projections to identify possible roadway and traffic improvements needed in the future. The following improvements, which are in addition to those prescribed for 2010, are identified for 2030:

- ❑ Construct an eastbound right-turn lane at the intersection of Business Loop 70 and Old Highway 63, which may be accommodated within existing right-of-way by relocating the eastbound right-turn closer to the intersection;
- ❑ Add a northbound left-turn lane at the intersection of Business Loop 70 and Old Highway 63 to separate the left-turn and through (to Paris Road) movements and increase the capacity of the northbound approach; and
- ❑ Provide additional northbound and southbound through lanes on Old Highway 63 at Broadway as well as eastbound and westbound right-turn lanes on Broadway. These improvements would be needed in order for each movement to operate below its capacity.

Note that the preceding improvements should be considered by 2030 irrespective of whether Conley Road is extended.

#### ***Forecasted Operating Conditions***

2030 forecasted operating conditions with the additional improvements are presented in **Table 11**, **Table 12**, and **Table 13**. As can be seen, operating conditions at the intersections along Highway 63 connector would be constrained by 2030, and the extension of Conley Road would have a nominal effect on those conditions. Assuming Conley Road is extended, the site's main entrance intersection with Conley Road would continue to operate acceptably (LOS D) overall in 2030, though two approaches would degrade to LOS E. However, should Conley Road not be extended, the intersection would function at an improved level of service (LOS C overall).

The roundabout recommended for Brickton & Trimble would operate at LOS B overall in 2030. However, it should be noted that volume-to-capacity ratios on some approaches would exceed 0.80 in both scenarios (with and without Conley Road). Since there is limited experience in the United States with modern roundabouts operating near capacity, it would be prudent to design the roundabout so that it could be expanded to two circulating lanes in the future if needed.

Overall, it can be concluded that the future improvements, in combination with those recommended in 2010, would facilitate adequate traffic operations in 2030. Moreover, the provision of the Conley Road extension, while beneficial from a regional connectivity standpoint, would not have a significant impact upon 2030 operating conditions in the study area. Ultimately, the base developments, the proposed redevelopment, and anticipated background growth could be accommodated by the 2030 road network both with and without the Conley Road extension. Therefore, it can be concluded that the extension is not necessary to accommodate 2030 forecasted traffic volumes.

**Table 11: 2030 Forecasted Operating Conditions (PM Peak Hour) – Major Intersections**

Intersection/Movement	Conley Road Extended	Conley Road <u>Not</u> Extended
<b>Highway 63 Connector &amp; I-70 South Ramp Terminal (signalized)</b>		
Eastbound I-70 Exit Ramp	D (48.5)	E (59.0)
Northbound Highway 63 Connector	D (40.5)	D (41.1)
Southbound Highway 63 Connector	D (41.1)	D (45.7)
<i>Overall Intersection</i>	<i>D (43.1)</i>	<i>D (48.0)</i>
<b>Highway 63 Connector &amp; Conley Road/I-70 Drive SE (signalized)</b>		
Eastbound Conley Road	E (63.6)	E (60.7)
Westbound I-70 Drive SE	F (86.9)	F (82.4)
Northbound Highway 63 Connector	F (127.2)	F (114.6)
Southbound Highway 63 Connector	C (27.4)	C (32.2)
<i>Overall Intersection</i>	<i>E (70.5)</i>	<i>E (65.2)</i>
<b>Conley Road &amp; Conley Road Ext./Site Main Entrance (signalized)</b>		
Eastbound Site Main Entrance	E (62.1)	D (48.7)
Westbound Conley Road	D (39.8)	C (20.5)
Northbound Conley Road	C (26.5)	B (15.4)
Southbound Conley Road Extension	E (69.7)	A (0.0)
<i>Overall Intersection</i>	<i>D (45.6)</i>	<i>C (24.8)</i>
<b>Business Loop 70 &amp; Old Highway 63 (signalized)</b>		
Eastbound Business Loop 70	B (14.6)	B (13.7)
Westbound Business Loop 70	B (14.5)	A (4.8)
Northbound Old Highway 63	B (18.7)	C (22.9)
<i>Overall Intersection</i>	<i>B (16.1)</i>	<i>B (15.5)</i>
<b>Business Loop 70 &amp; I-70 Westbound Exit Ramp (unsignalized)</b>		
I-70 Exit Ramp Southbound Left-Turn	C (21.1)	N/A
<b>Broadway &amp; Brickton Road (partial Stop)</b>		
Eastbound Broadway Left-Turn	B (14.1)	B (14.5)
Southbound Brickton Road Right-Turn	C (19.0)	C (23.8)
<b>Broadway &amp; Trimble Road (signalized)</b>		
Eastbound Broadway	C (24.9)	C (28.4)
Westbound Broadway	C (29.0)	C (31.6)
Northbound Trimble Road	D (46.9)	D (46.9)
Southbound Trimble Road	D (35.2)	D (37.8)
<i>Overall Intersection</i>	<i>C (29.2)</i>	<i>C (32.2)</i>
<b>Brickton Road &amp; Trimble Road (roundabout)</b>		
Eastbound Trimble Road	A (8.4)	B (19.6)
Westbound Trimble Road	C (25.5)	C (24.8)
Northbound Brickton Road	B (10.1)	B (10.7)
Southbound Brickton Road	B (12.8)	C (22.1)
<i>Overall Intersection</i>	<i>B (13.5)</i>	<i>B (18.3)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

**Table 12: 2030 Forecasted Operating Conditions (PM Peak Hour) – Broadway  
Marketplace Driveways**

Intersection/Movement	Conley Road Extended	Conley Road <u>Not</u> Extended
<b>Conley Road &amp; Wal-Mart Access Drive</b>		
Northbound Left-Turn	B (13.6)	B (10.7)
Eastbound Right-Turn	C (15.3)	B (13.5)
<b>Conley Road &amp; Lowe's Access Drive (signalized)</b>		
Eastbound Approach	C (27.6)	C (22.2)
Northbound Approach	B (11.8)	B (12.0)
Southbound Approach	C (22.7)	C (21.8)
<i>Overall Intersection</i>	<i>B (19.7)</i>	<i>B (17.9)</i>
<b>Conley Road &amp; Sam's Access Drive</b>		
Northbound Left-Turn	B (10.2)	B (10.4)
Eastbound Approach	D (29.3)	D (28.8)
<b>Conley Road &amp; IHOP Access Drive</b>		
Northbound Left-Turn	A (9.7)	B (10.1)
Eastbound Approach	C (22.7)	D (25.6)
<b>Conley Road &amp; Longhorn Access Drive</b>		
Northbound Left-Turn	A (9.1)	A (9.4)
Eastbound Approach	D (31.5)	E (37.5)

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

**Table 13: 2030 Forecasted Operating Conditions (PM Peak Hour) – Broadway & Old  
Highway 63**

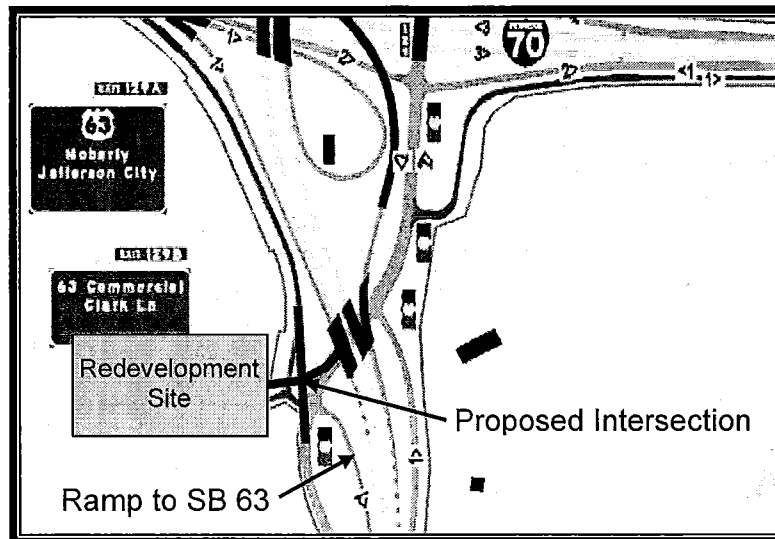
Intersection/Movement	Conley Road Extended	Conley Road <u>Not</u> Extended
<b>Broadway &amp; Old Highway 63 (signalized)</b>		
Eastbound Broadway	D (46.0)	D (46.4)
Westbound Broadway	B (18.0)	B (15.8)
Northbound Old Highway 63	E (62.5)	F (88.8)
Southbound Old Highway 63	E (62.0)	F (95.7)
<i>Overall Intersection</i>	<i>D (42.8)</i>	<i>D (51.4)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)

### **Compatibility of Proposed Improvements with "Improve I-70"**

While "Improve I-70" was not explicitly evaluated by this study (at MoDOT's direction), it was necessary to demonstrate that access to the redevelopment site, the site's main entrance intersection with Conley Road, and the proposed area road system in general could accommodate the future "Improve I-70" improvements being contemplated, namely the proposed ramp from Highway 63 connector/Conley Road to southbound Highway 63. The planned "Improve I-70" improvements are illustrated in **Figure 6**.





**Figure 6: “Improve I-70” Recommended Interchange – Highway 63/Highway 63 Connector**

The proposed site main entrance intersection with Conley Road is superimposed in magenta lines on top of the “Improve I-70” improvements shown in blue and green. As can be seen, the proposed intersection location and configuration does not lend itself to the “Improve I-70” ramp to southbound Highway 63. The ramp under consideration would be too close to the proposed intersection for either to function effectively. Effort was undertaken to configure the proposed intersection as a roundabout so that the ramp could be included as the fifth leg. However, preliminary analysis revealed that a roundabout would not provide sufficient capacity, and the option was not considered further.

While efforts to connect the ramp directly to Conley Road were unsuccessful, a less conventional alternative was developed as illustrated in **Exhibit 12**. Instead of reconstructing the southbound ramp, this alternative would maintain the existing ramp and its alignment under Highway 63. Access to the ramp from Highway 63 connector would be established at a new signalized intersection, which would also serve the northbound exit ramp. Southbound traffic destined to Highway 63 would cross the lanes carrying traffic from Conley Road at that signal and travel under Highway 63 on the existing ramp.

The following geometrics would be required at the signalized ramp terminal intersection with Highway 63 connector:

- ❑ **Northbound Highway 63 Connector:** two through lanes ;
- ❑ **Southbound Highway 63 Connector:** two left-turn and one through lane ; and
- ❑ **Northbound Highway 63 Exit Ramp Approach:** one left-turn and two right-turn lanes.

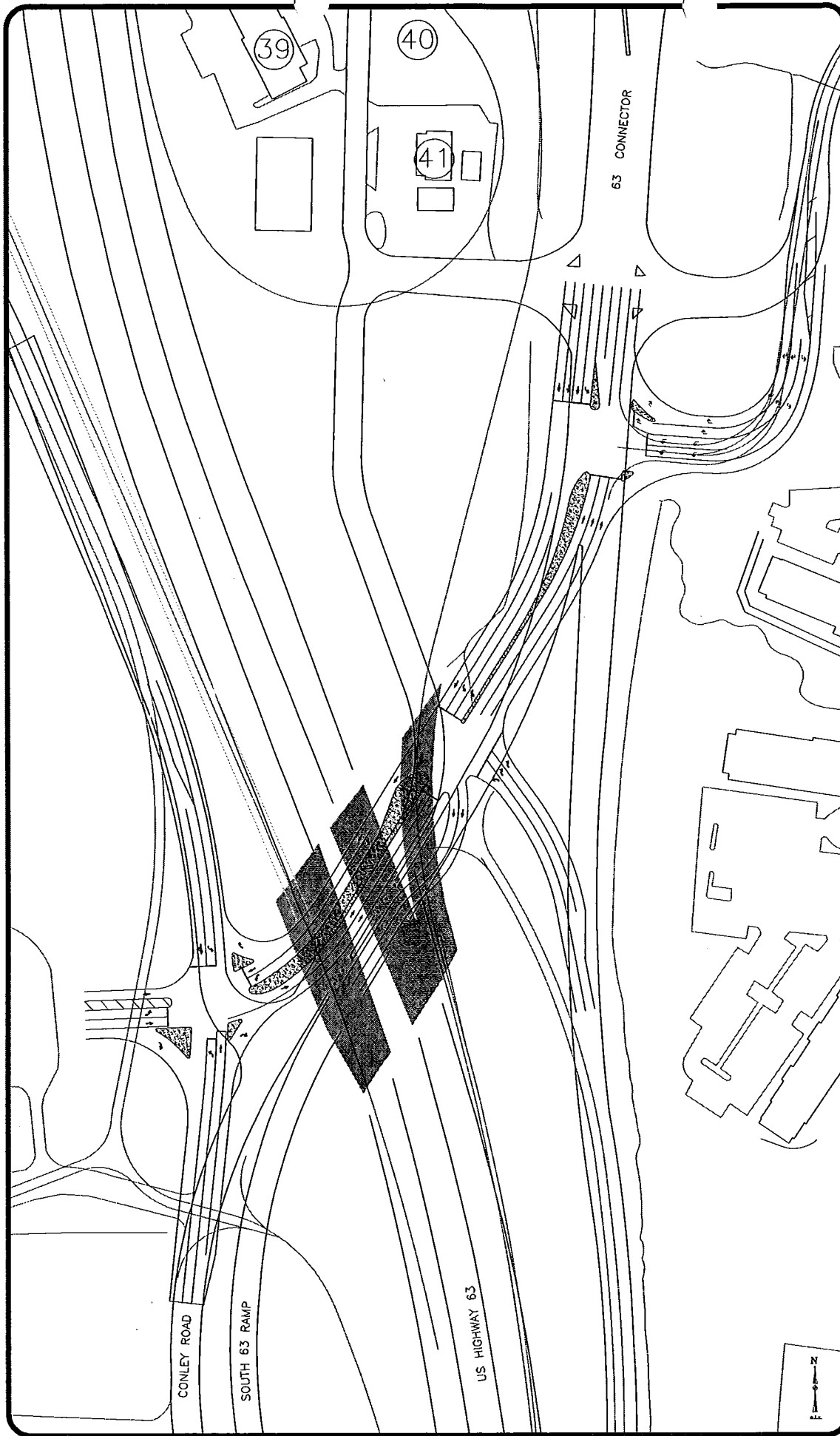
The intersection’s signal would serve traffic with three phases: protected southbound left-turn phase overlapped with right-turn phase exiting Highway 63, northbound-southbound through phase, and a combination left-turn and right-turn phase exiting Highway 63.

Overall, this alternative is advantageous in that it maintains compatibility with “Improve I-70”. In fact, the only deviation is the addition of the southbound left-turn movement at the signalized intersection with the northbound Highway 63 exit ramp. It also preserves the area road system on the west side of Highway 63, namely the alignments of Conley Road, the Conley Road extension, and the site’s main entrance. Lastly, the existing ramp to southbound Highway 63 could be utilized in its current form, representing a considerable cost savings.

The alternative does have disadvantages. Due to geometric limitations, traffic destined to southbound Highway 63 from Conley Road would not be served by the ramp, and instead those motorists would have to travel to Broadway for access to southbound Highway 63. Moreover, costly widening under the Highway 63 overpass would be necessary to accommodate both the ramp and Highway 63 connector lanes to/from Conley Road. Lanes would likely be required between the piers and north abutment, requiring removal of the existing embankment and installation of retaining walls.

It should be emphasized that this alternative is envisioned to be complementary to “Improve I-70” and is not intended to replace any of the directional ramps proposed for the future Highway 63 interchange with I-70. To that end, its implementation is not recommended until such time that the interchange can be reconstructed.

Only minor modifications would be anticipated at adjacent intersections along Highway 63 connector. The intersection with I-70 Drive Southeast would be retrofitted as a three-legged ‘T’ intersection, as proposed by “Improve I-70”. Three northbound and southbound through lanes would be provided in addition to one southbound left-turn lane. The westbound approach should be enhanced with two left-turn and two right-turn lanes. Recall that this approach would be widened in 2010 for a dedicated right-turn lane and improved alignment at the intersection. Therefore, sufficient pavement width should be available to accommodate four lanes.



**Exhibit 12: 2030 "Improve I-70" Compatible Alternative**

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The laneage proposed in 2010 for the Conley Road intersection with the Conley Road extension/site main entrance would be effectively maintained, though widening under Highway 63 would require the directions of travel on the east leg to be separated by the bridge piers. This would allow the northbound right-turn movement to be channelized as a “free” movement with right-of-way to one of two through lanes departing the intersection eastbound. Additionally, the striped out section on the west leg would be relocated to separate inbound and outbound traffic. This would be necessary in order for the modified east leg to favorably align with the west leg.

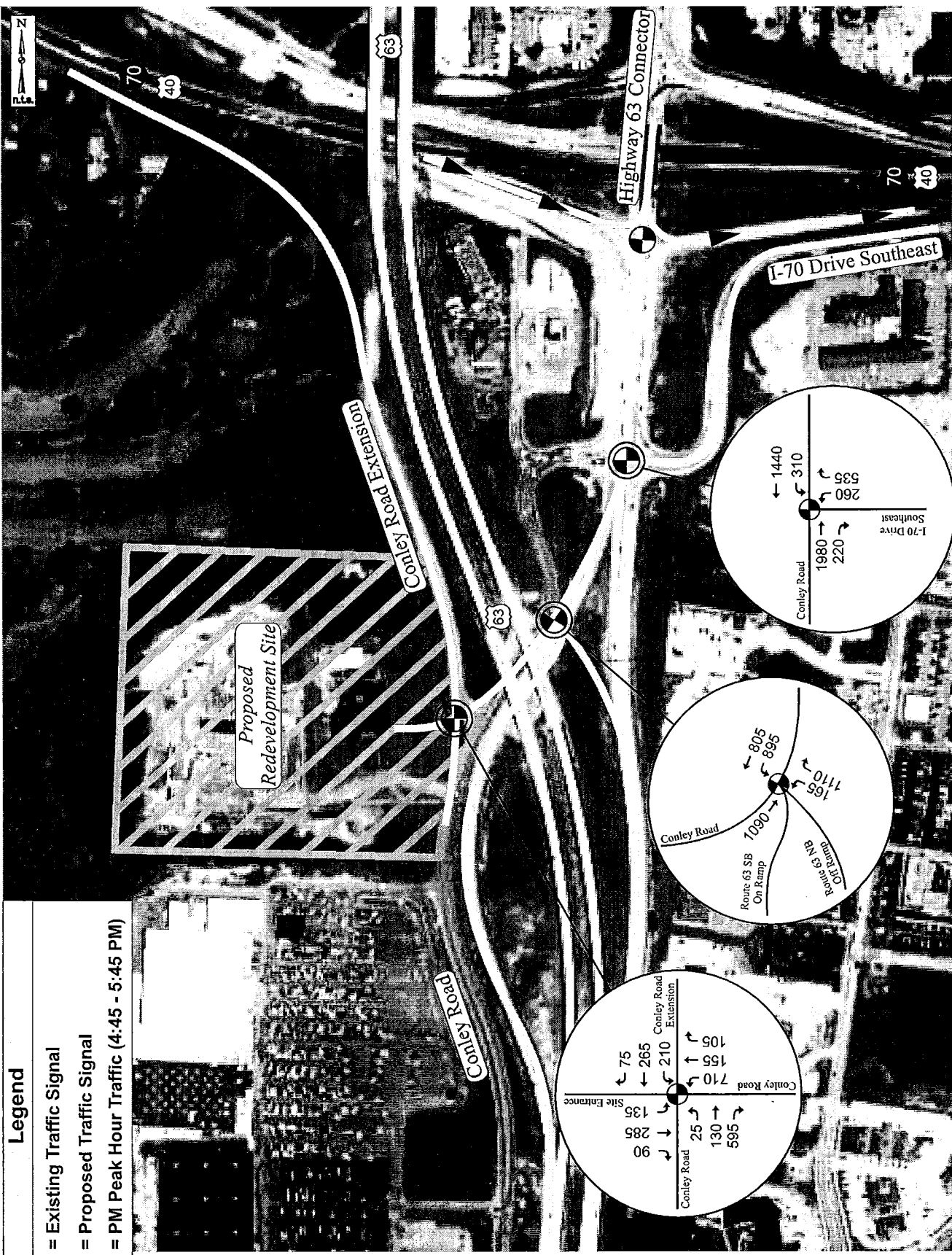
Since the alternative is to be complementary to “Improve I-70”, it would not experience the same magnitude of traffic growth that was applied previously in this study. In fact, traffic could actually decrease with “Improve I-70”, because traffic diverted to the new interchange ramps may outweigh growth along Highway 63 connector. For consideration of “Improve I-70”, 2030 traffic along Highway 63 connector was only nominally increased from 2010 in order to be conservative.

The 2030 traffic volumes considered by this evaluation are illustrated in **Exhibit 13** with Conley Road extended and in **Exhibit 14** without Conley Road extended. Forecasted operating conditions, assuming the aforementioned improvements and intersection configurations, are summarized in **Table 14**. As can be seen, the intersections would each operate at LOS C or better overall and all individual approaches would operate at LOS D or better.

**Table 14: 2030 Forecasted Operating Conditions – “Improve I-70” Compatible Alternative**

Intersection/Movement	Conley Road Extended	Conley Road Not Extended
<b>Highway 63 Connector &amp; Conley Road/I-70 Drive SE (signalized)</b>		
Westbound I-70 Drive SE	C (34.0)	C (31.2)
Northbound Highway 63 Connector	C (27.4)	C (24.9)
Southbound Highway 63 Connector	A (8.3)	A (8.1)
<i>Overall Intersection</i>	<i>C (21.5)</i>	<i>B (19.2)</i>
<b>Highway 63 Connector &amp; Highway 63 Ramps (signalized)</b>		
Highway 63 Exit Ramp	C (33.1)	C (24.2)
Northbound Highway 63 Connector	C (27.1)	C (25.4)
Southbound Highway 63 Connector	C (29.2)	C (20.3)
<i>Overall Intersection</i>	<i>C (29.9)</i>	<i>C (22.7)</i>
<b>Conley Road &amp; Conley Road Ext./Site Main Entrance (signalized)</b>		
Eastbound Site Main Entrance	E (56.0)	D (49.8)
Westbound Conley Road	C (33.6)	B (15.5)
Northbound Conley Road	B (18.5)	B (12.2)
Southbound Conley Road Extension	E (72.6)	A (0.0)
<i>Overall Intersection</i>	<i>D (41.5)</i>	<i>C (22.1)</i>

X (xx.x) - Level of Service (Vehicular delay in seconds per vehicle)



**Exhibit 13: 2030 Forecasted Traffic Volumes**  
 "Improve I-70" Compatible Alternative -  
 Conley Road Extended

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## **Conclusion**

Crawford, Bunte, Brammeier previously completed a traffic impact study for the redevelopment of the Missouri Department of Transportation (MoDOT) maintenance facility – located on Conley Road north of the Broadway Marketplace shopping center – and Conley Road extension in 2007.

Since that time, Hy-Vee is now constructing a new store at the vacant MegaMarket site within the Broadway Marketplace. The occupancy of that site was not accounted for in the previous traffic impact study, and thus the impact of the future Hy-Vee trips was not considered. Furthermore, the feasibility of the two-lane extension of Conley Road northwest to Business Loop 70 has become clouded by circumstances concerning right-of-way acquisition from Columbia Country Club. However, the long-term ramifications of not extending Conley Road were not considered by previous efforts.

In lieu of issuing more addendums, it was determined that revising and repackaging the previous traffic impact study would most effectively address these outstanding items at one time. This study update incorporated the additional trips generated by the Hy-Vee grocery store totaling 77,722 ft<sup>2</sup> and evaluated opening year and design year time horizons both *with and without the Conley Road extension*. The overarching goals were to verify the adequacy of the previously recommended road improvements and determine if the Conley Road extension is needed to mitigate the trip generation impact of the proposed redevelopment.

Capacity analyses of existing conditions indicate that nearly all of the signalized intersections in the study area currently have acceptable overall conditions (LOS D or better) during the p.m. peak hour. Conditions at the intersection of Highway 63 connector and Conley Road/I-70 Drive Southeast are constrained; and as a result, the intersection operates at LOS E overall. Additionally, a few individual approaches/movements at other intersections have existing deficiencies.

Traffic forecasts were prepared for the proposed redevelopment which indicated the site could generate a total of 560 “new” trips during the p.m. peak hour. In addition, forecasts were developed to reflect the anticipated diversion of traffic to the Conley Road Extension. Estimates of the diversions were based upon output from the City’s travel demand model, a limited origin-destination study and prevailing travel patterns in the area. Traffic forecasts for Hy-Vee, the Broadway Bluffs, and Centerstate Crossing Phase I were reflected in the analyses.

2010 forecasted conditions were evaluated to determine opening year operating conditions and also to identify roadway and traffic control improvements that would be needed to mitigate the impact of the redevelopment. The following improvements were prescribed:

- Construct a four-leg signalized intersection adjacent to the redevelopment site, thereby rerouting the current Conley Road alignment through the intersection’s south and east legs. The main entrance to the site would occupy the west leg, and the Conley Road extension would depart from the north leg.

- ❑ Widen to provide triple left-turn lanes on eastbound Conley Road at Highway 63 connector, and widen to provide a dedicated right-turn lane on westbound I-70 Drive Southeast at Highway 63 connector.
- ❑ Convert the existing Wal-Mart drive onto Conley Road to three-quarters access (prohibiting eastbound left-turns) and construct a dedicated southbound right-turn lane on Conley Road at the entrance.
- ❑ Signalize the existing Lowe's drive onto Conley Road, and construct a southbound right-turn lane on Conley Road at the entrance. To support signalizing the intersection, the west leg should be widened from 35 feet to 40 feet.
- ❑ Construct a roundabout at the intersection of Trimble Road and Brickton Road to alleviate congestion that is expected once Hy-Vee is operational. *It must be emphasized that this improvement is not necessary to mitigate the impact of the proposed redevelopment. Rather the need for a roundabout is driven by the additional traffic that would be generated by Hy-Vee.* A single-lane roundabout with a northbound right-turn by-pass is recommended, though the design should accommodate future expansion to two circulating lanes.

Should Conley Road not be extended, the aforementioned improvements would still be needed. The absence of the extension would trigger one minor change in traffic signal phasing at the site's main entrance intersection with Conley Road. Without north-south through traffic at the intersection, protected northbound and southbound left-turn phasing would not be needed as all northbound and southbound movements could operate under a common green phase.

The 2010 improvements would effectively mitigate the impacts of the proposed redevelopment and would adequately serve projected traffic demands both with and without the Conley Road extension. While the proposed extension constitutes a regional connectivity enhancement, *its implementation is not necessary to accommodate traffic generated by the proposed redevelopment.* In fact, operating conditions at most study area intersections would not be significantly affected by the Conley Road extension or its absence.

The additional traffic generated by Hy-Vee would be adequately accommodated by the recommended improvements. Improvements (a roundabout) would be needed at the intersection of Trimble and Brickton in 2010 to mitigate the impact of Hy-Vee. In the previous study, improvements were not identified at that location until 2030. On a separate note, improvements identified by the previous study for Broadway with Old Highway 63 have been implemented by the City of Columbia. No addition improvements are recommended at that intersection for 2010.

An analysis of "design year" 2030 conditions was completed to determine the ability of the area road system to accommodate long-term traffic demands. Additional improvements beyond those recommended in 2010 were identified as follows:



- ❑ Construct an eastbound right-turn lane at the intersection of Business Loop 70 and Old Highway 63, and provide a northbound left-turn lane to separate the left-turn and through (to Paris Road) movements.
- ❑ Provide additional northbound and southbound through lanes on Old Highway 63 at Broadway as well as eastbound and westbound right-turn lanes on Broadway. These improvements would be needed in order for each movement to operate below its capacity.

The preceding 2030 improvements should not be construed as the responsibility of the proposed redevelopment, but rather they are recommendations to help the review agencies plan for the future. They should, however, be considered irrespective of whether Conley Road is extended.

It should be emphasized that the Conley Road extension, while beneficial from a regional connectivity standpoint, would not have a significant impact upon 2030 operating conditions in the study area. Ultimately, the base developments, the proposed redevelopment, and anticipated background growth could be accommodated by the 2030 road network both with and without the Conley Road extension. Therefore, *it can be concluded that the extension is not necessary to accommodate 2030 forecasted traffic volumes.*

While “Improve I-70” was not included in this study, it was demonstrated that the proposed area road system could accommodate future improvements being contemplated, namely the proposed ramp from Highway 63 connector/Conley Road to southbound Highway 63. Efforts to connect the ramp as proposed were unsuccessful, but an alternative was developed that would utilize the existing ramp and allow it to intersect Highway 63 connector at the northbound exit ramp intersection. Analyses indicate that this alternative would operate favorably based on 2030 traffic volume projections.